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SDS #: 838.05

Revision Date: March 25, 2014

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

L-Tyrosine

Signal Word
WARNING

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemtrec Emergency Phone Number: (800) 424-10460

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing dust or fumes (P261).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
L-Tyrosine	60-18-4	C ₉ H ₁₁ NO ₃	181.19	
Synonyms: 4-Hydroxyphenylalanine; (S)-Tyrosine; 2-Amino-3-(4-hydroxyphenyl)propanoic acid				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell (P312).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313).

If on skin: Wash with plenty of water (P302+P352). **If skin irritation occurs:** Get medical advice or attention (P332+P313).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.
 When heated to decomposition, may emit toxic fumes.
 In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA Code
 None established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Wipe up the spill, place in a sealed bag or container, and dispose. Wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #1. Store with acids, anhydrides and peracids.
 Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).
 Use only in a hood or well-ventilated area (P271).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White crystalline powder. Odorless. Melting point: 300 °C (decomposes)
 Soluble: Alkaline solutions. Slightly in water. Insoluble in alcohol and acetone. Specific gravity: 1.456

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers.
 Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Eye, skin, and body tissue irritant. ORL-RAT LD₅₀: N.A.
 Chronic effects: N.A. IHL-RAT LC₅₀: N.A.
 Target organs: N.A. SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
 Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed

SECTION 16 — OTHER INFORMATION

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OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

Revision Date: March 25, 2014

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Material Safety Data Sheet

Name : **LA's Totally Awesome Window(Glass) Cleaner - Blue**

Date Issued : 9/20/04

Date Revised: 1/17/11

US MANUFACTURER:

**Awesome Products Inc.
Phone 1-800-482-2875
6370 Altura Blvd., Buena Park, CA 90620
Emergency Phone : 714-562-8873**

Hazard Rating	HMIS	Hazard	NFPA
4 - Very High	1	Health	1
3 - High	0	Flammability	0
2 - Moderate	0	Reactivity	0
1 - Slight		Special	
0 - Insignificant			

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME

Window(Glass) Cleaner - Blue

REASON FOR CHANGE

No significant changes.

PRODUCT USE

Home care cleaning product

PRODUCT DESCRIPTION

- 22 oz LA's Totally Awesome Blue Window Cleaner**
- 32 oz LA's Totally Awesome Blue Window Cleaner**
- 32 oz. Super Window Blue Glass Cleaner**
- 32 oz. Power Magic Blue Glass Cleaner**
- 32 oz. Glassex Window Cleaner**
- 40 oz. Awesome Window Cleaner, Bonus**
- 64 oz LA's Totally Awesome Blue Window Cleaner**
- 128 oz. (1 Gal) LA's Totally Awesome Blue Window Cleaner**

SECTION 2 - INGREDIENT INFORMATION

WEIGHT %	INGREDIENT & EXPOSURE LIMIT
0.5 to 1.0	Ethoxylated Alcohol (CAS # 9036-19-5)
0.5 to 3.0	Isopropyl Alcohol (CAS # 67-63-0)
93 to 99	Water (CAS # 7732-18-5)

SECTION 3 - HEALTH HAZARDS IDENTIFICATION (Also see Section 11)

ROUTE(S) OF ENTRY

Eye contact. Skin Contact

Effects of Acute Exposure

Eye

 May Cause : Mild eye irritation.

Skin

 Prolonged or repeated contact may cause : irritation

Inhalation

 None Known

Material Safety Data Sheet

Name : **LA's Totally Awesome Window(Glass) Cleaner - Blue**

Date Issued : 9/20/04

Date Revised: 1/17/11

Ingestion

None Known.

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE

None Known.

SECTION 4 - FIRST AID MEASURES

EYE CONTACT

Flush immediately with plenty of water for at least 15 to 20 minutes.

If irritation persists, get medical attention.

SKIN CONTACT

Rinse with plenty of water

INHALATION

No special requirements.

INGESTION

Immediately drink 1-2 glasses of water or milk. Seek immediate medical attention.

SECTION - 5 - FIRE AND EXPLOSION INFORMATION

FLASH POINT

Not Applicable

FLAMMABLE LIMITS

Not applicable.

AUTOIGNITION TEMPERATURE

Not applicable.

EXTINGUISHING MEDIA

Foam. CO₂. Dry chemical. Water Fog.

SPECIAL FIRE FIGHTING PROCEDURES

Normal fire fighting procedures may be used.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Container may melt and leak in heat of fire

SECTION 6 - PREVENTATIVE RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Dike large spills. Absorb with oil-dri or similar inert material

Sweep or scrape up and containerize

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONARY INFORMATION

May be : Eye irritant. Avoid contact with eyes. If such contact occurs, flush immediately with plenty of water for at least 15 to 20 minutes.

If irritation persists, seek medical aid. Keep out of reach of children.

Material Safety Data Sheet

Name : **LA's Totally Awesome Window(Glass) Cleaner - Blue**

Date Issued : 9/20/04

Date Revised: 1/17/11

SECTION 8 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

No special requirements under normal use conditions.

VENTILATION

No special requirements.

PROTECTIVE GLOVES

No special requirements under normal use conditions.

EYE PROTECTION

No special requirements under normal use conditions.

OTHER PROTECTIVE MEASURES

No special requirements.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

COLOR

Blue

PRODUCT STATE

Liquid

ODOR

Ammonia

pH

10

ODOR THRESHOLD

Not available.

SOLUBILITY IN WATER

Complete

SPECIFIC GRAVITY (H₂O = 1)

1.00

VAPOR DENSITY (AIR = 1)

—————

EVAPORATION RATE (BUTYL ACETATE = 1)

Not available

VAPOR PRESSURE (mm HG)

Not Available.

BOILING POINT

212 °F (100 °C)

FREEZING POINT

- 32 °F (0 °C)

COEFFICIENT OF WATER / OIL

Material Safety Data Sheet

Name : **LA's Totally Awesome Window(Glass) Cleaner - Blue**

Date Issued : 9/20/04

Date Revised: 1/17/11

Not available.

VOLATILE ORGANIC COMPOUNDS(VOCs)
< 2 %

SECTION 10 - STABILITY AND REACTIVITY

STABILITY

Stable

STABILITY - CONDITIONS TO AVOID

Not applicable

INCOMPATIBILITY

None known.

HAZARDOUS POLYMERIZATION

Will not occur.

HAZARDOUS POLYMERIZATION - CONDITIONS TO AVOID

Not applicable

SECTION 11 - TOXICOLOGY INFORMATION (Also see Section 3)

LD50 (ACUTE ORAL TOX)

Not available.

LD 50 (ACUTE DERMAL TOX)

Not available.

LD50 (ACUTE INHALATION TOX)

Not available.

EFFECTS OF CHRONIC EXPOSURE

None known.

CARCINOGENICITY

None known.

REPRODUCTIVE TOXICITY

None known.

TERATOGENICITY

None known.

MUTAGENICITY

None known.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA

Contains readily degradable surfactants.

Material Safety Data Sheet

Name : **LA's Totally Awesome Window(Glass) Cleaner - Blue**

Date Issued : 9/20/04

Date Revised: 1/17/11

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL INFORMATION

Waste from normal product use may be sewer to a publicly-owned treatment works (POTW) in compliance with applicable Federal / Provincial / State / Local / Municipal pretreatment requirements.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT INFORMATION

Not applicable.

CANADIAN SHIPPING NAME

TDG CLASSIFICATION

Non-regulated.

PIN/NIP

Not applicable

PACKING GROUP

Not applicable.

EXEMPTION NAME

Not applicable.

SECTION 15 -REGULATORY INFORMATION

WHIMS CLASSIFICATION

Not applicable

All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances control Act (TSCA) Chemical Substance Inventory.

All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

This product is not subject to the reporting requirements under the California's Proposition 65.

SECTION 16 - OTHER INFORMATION

ADDITIONAL INFORMATION

Use as directed.

EPA REGISTRATION

Not applicable.

PREPARATION INFORMATION -

PREPARED BY

Manufacturer's Technical Support Department. Refer to page 1 (Manufacturer) for contact information.

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PRINT DATE : September 23, 2004

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 428.00

Revision Date: February 6, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Lactose

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word N/A

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent laboratory practices should be observed.

Product should be treated as a chemical and is not for consumption as it has been stored with other nonfood-grade chemicals.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Lactose monohydrate	64044-51-5	$C_{12}H_{22}O_{11} \cdot H_2O$	360.31	
Synonym: Milk sugar				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA CODE
None
established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines and amides.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes. Wash hands thoroughly after handling.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

White crystalline powder. Odorless.
Soluble: Water. Slightly in many organic solvents.

Melting point: 203.5 °C (decomposes)
Specific gravity: 1.525

SECTION 10 — STABILITY AND REACTIVITY

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD₅₀: N.A.
IHL-RAT LC₅₀: N.A.
SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.
Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

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Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Revision Date: February 6, 2014

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : LIFT-OFF BASEBOARD STRIPPER

Other means of identification : Not applicable

Recommended use : Maintenance Product

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : Product is sold ready to use.

Company : Ecolab Inc.
1 Ecolab Place
St. Paul, Minnesota USA 55102
1-800-352-5326

Emergency health information : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 10/18/2019

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable aerosols : Category 2

Skin corrosion : Category 1A

Serious eye damage : Category 1

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

GHS label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Flammable aerosol.
Causes severe skin burns and eye damage.
May cause drowsiness or dizziness.

Precautionary Statements : **Prevention:**
Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe dusts or mists. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection. Intentional misuse by deliberate inhalation may be harmful or fatal.

Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several

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LIFT-OFF BASEBOARD STRIPPER

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical name	CAS-No.	Concentration (%)
Butane	106-97-8	5 - 10
2-butoxyethanol	111-76-2	5 - 10
propane	74-98-6	5 - 10
Isopropanol	67-63-0	1 - 5

SECTION 4. FIRST AID MEASURES

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
- Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire fighting : Pressurised container: May burst if heated.
Flammable aerosols

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LIFT-OFF BASEBOARD STRIPPER

- Hazardous combustion products : Decomposition products may include the following materials:
Carbon oxides
- Special protective equipment for fire-fighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Contents under pressure. Do not puncture. Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
- Conditions for safe storage : Keep in a cool, well-ventilated place. Do not store near acids. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
- Storage temperature : 20 °C to 45 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Butane	106-97-8	TWA	800 ppm 1,900 mg/m ³	NIOSH REL
		STEL	1,000 ppm	ACGIH
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m ³	NIOSH REL
		TWA	50 ppm 240 mg/m ³	OSHA Z1
propane	74-98-6	TWA	1,000 ppm 1,800 mg/m ³	NIOSH REL
		TWA	1,000 ppm	OSHA Z1

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			1,800 mg/m ³	
Isopropyl Alcohol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m ³	NIOSH REL
		STEL	500 ppm 1,225 mg/m ³	NIOSH REL
		TWA	400 ppm 980 mg/m ³	OSHA Z1

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Wear eye protection/ face protection.

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : aerosol
Color : clear, colorless
Odor : ammoniacal
pH : 12.0 - 13.0, (100 %)
Flash point : Not applicable
Odor Threshold : No data available
Melting point/freezing point : No data available
Initial boiling point and boiling range : > 35 °C
Evaporation rate : No data available
Flammability (solid, gas) : Not applicable
Upper explosion limit : No data available
Lower explosion limit : No data available
Vapor pressure : No data available
Relative vapor density : No data available

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LIFT-OFF BASEBOARD STRIPPER

Relative density	: 0.981 - 1.001
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Molecular weight	: No data available
VOC	: No data available
Heat of combustion	: 11.63 kJ/g

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: Acids Bases Metals
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Eye contact, Skin contact

Potential Health Effects

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation. Inhalation may cause central nervous system effects. Intentional misuse by deliberate inhalation may be harmful or fatal.
Chronic Exposure	: Health injuries are not known or expected under normal use.

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LIFT-OFF BASEBOARD STRIPPER

Experience with human exposure

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough, Dizziness, Drowsiness

Toxicity

Product

Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg
Acute inhalation toxicity	: 4 h Acute toxicity estimate : 116.59 mg/l Test atmosphere: vapor
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg
Skin corrosion/irritation	: No data available
Serious eye damage/eye irritation	: No data available
Respiratory or skin sensitization	: No data available
Carcinogenicity	: No data available
Reproductive effects	: No data available
Germ cell mutagenicity	: No data available
Teratogenicity	: No data available
STOT-single exposure	: No data available
STOT-repeated exposure	: No data available
Aspiration toxicity	: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects	: This product has no known ecotoxicological effects.
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Product

Toxicity to fish	: No data available
Toxicity to daphnia and other aquatic invertebrates	: No data available
Toxicity to algae	: No data available

Components

Toxicity to fish	: Butane 96 h LC50 Fish: 22.03 mg/l
	2-butoxyethanol 96 h LC50: 1,474 mg/l
	Isopropanol 96 h LC50 Pimephales promelas: 9,640 mg/l

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Components

Toxicity to daphnia and other aquatic invertebrates : 2-butoxyethanol
48 h EC50: 690 mg/l

Isopropanol
LC50 Daphnia magna (Water flea): > 10,000 mg/l

Components

Toxicity to algae : 2-butoxyethanol
72 h EC50: 911 mg/l

Persistence and degradability

Readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste : D002 (Corrosive)

SECTION 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

UN number : 1950
Description of the goods : Aerosols
Class : 2.1
Environmentally hazardous : no

Sea transport (IMDG/IMO)

UN number : 1950
Description of the goods : AEROSOLS
Class : 2.1

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Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)
Skin corrosion or irritation

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:
2-butoxyethanol 111-76-2 5 - 10 %

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California Cleaning Product Right to Know Act of 2017 (SB 258)

This regulation applies to this product.

Chemical Name	CAS-No.	Function	List(s)
water	7732-18-5	Diluent	Not Applicable
Butane	106-97-8	Propellant	Not Applicable
2-butoxyethanol	111-76-2	Solvent	20
propane	74-98-6	Propellant	Not Applicable
Isopropanol	67-63-0	Solvent	20

*refer to ecolab.com/sds for electronic links to designated lists

The ingredients of this product are reported in the following inventories:

Switzerland. New notified substances and declared preparations :

On the inventory, or in compliance with the inventory

United States TSCA Inventory :

On TSCA Inventory

Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL

Australia Inventory of Chemical Substances (AICS) :

On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemical Substances :

not determined

Japan. ENCS - Existing and New Chemical Substances Inventory :

On the inventory, or in compliance with the inventory

SAFETY DATA SHEET

LIFT-OFF BASEBOARD STRIPPER

Korea. Korean Existing Chemicals Inventory (KECI) :
On the inventory, or in compliance with the inventory

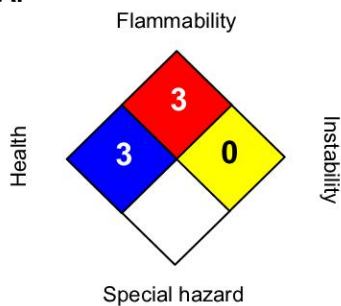
Philippines Inventory of Chemicals and Chemical Substances (PICCS) :
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances in China (IECSC) :
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI) :
On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Issuing date : 10/18/2019
Version : 1.4
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

MATERIAL SAFETY DATA SHEET

N/A=NOT APPLICABLE

EFFECTIVE DATE 5/06

SECTION 1 - PRODUCT IDENTIFICATION

Product Name: LIGHTNING DEGREASER & WAX STRIPPER CONC. (HD101)

Supplier's Name: Banner Chemical Corp.
Supplier's Address: 111 Hill St.
Orange, NJ 07050

Chemical Family: CLEANING COMPOUND
Proper Shipping Name: CLEANING COMPOUND
DOT Shipping Hazard: N/A
DOT Labels Required: N/A

EMERGENCY TELEPHONE NUMBER 973/676-2900
HMIS RATING (0-4): HEALTH: 1 FIRE: 0 REACTIVITY: 0

SECTION 2 - HAZARDOUS INGREDIENTS

Table with 4 columns: CHEMICAL NAME, CAS NO., % (optional), TLV(ACGIH). Rows include Sodium Hydroxide and 2-Butoxy ethanol.

*This toxic chemical is subject to reporting requirements of Sec. 313-SARA Title III-40CFR. Part 372

SECTION 3 - PHYSICAL DATA

BOILING POINT: 212°F.
VAPOR PRESSURE (mmHg @ 20°C): N/A
VAPOR DENSITY (air=1): N/A
SPECIFIC GRAVITY: 1-1.2
PHYSICAL DESCRIPTION: Thin green liquid; mild clean aroma
pH: 10.5-11.5
SOLUBILITY IN WATER: 100%
EVAPORATION RATE: 1.0
% VOLATILE BY VOLUME: 94

SECTION 4 - FIRE and EXPLOSION DATA

FLASH POINT: None at boiling.
FLAMMABLE LIMITS: N/A
EXTINGUISHING MEDIA: Media proper to primary cause of fire.
SPECIAL FIREFIGHTING PROCEDURES: None known.
UNUSUAL FIRE & EXPLOSION HAZARD: None known

SECTION 5 - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: None known
EFFECTS OF OVEREXPOSURE: May cause drying and chapping of skin due to alkalinity, water and solvent. May cause eye irritation.
EMERGENCY & FIRST AID PROCEDURES: EYE: Immediately flush with copious amount of water for at least 15 min. SKIN: Remove contaminated clothing and wash skin thoroughly. INHALATION: Remove to fresh air. INGESTION: General precautionary measures suggest inducing vomiting immediately. Never give anything by mouth to an unconscious person. In all cases consult a physician.

SECTION 6 - REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY: Acids

SECTION 7 - SPILL or LEAK PROCEDURES

SPILLAGE: Contain and absorb with Ban-dri, earth, sand or similar inert material
WASTE DISPOSAL METHOD: In a manner consistent with federal, state and local regulations.

HAZARDOUS DECOMPOSITION PRODUCTS: None known
HAZARDOUS POLYMERIZATION: Will not occur

SECTION 8 - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Can use NIOSH approved respirator.
VENTILATION: Local exhaust sufficient.
GLOVES: Rubber or plastic-coated.
EYE PROTECTION: Goggles or face-shield if splashing expected.
OTHER PROTECTIVE EQUIPMENT: Can be used.

SECTION 9 - SPECIAL PRECAUTIONS

Do not get in eyes or on skin. Wash thoroughly after handling. Use with adequate ventilation. Store away from other chemicals and out of reach of children. Store in closed container away from fire and extreme heat.

The data and recommendations presented herein are based upon research of others and are believed to be accurate. The manufacturer makes no warranties, express or implied, as to the accuracy, completeness or adequacy of the information contained herein. The manufacturer shall not be liable (regardless of fault) to the vendee, the vendee's employees or anyone for any direct, special or consequential damages arising out of, or in connection with, the accuracy, completeness, adequacy or furnishing such information.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : LIME-A-WAY
 Other means of identification : Not applicable
 Recommended use : Delimer
 Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.8 % - 4.0 %

Company : Ecolab Inc.
 1 Ecolab Place
 St. Paul, Minnesota USA 55102
 1-800-352-5326

Emergency health information : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 09/23/2019

SECTION 2. HAZARDS IDENTIFICATION
GHS Classification
Product AS SOLD

Skin corrosion : Category 1A
 Serious eye damage : Category 1

Product AT USE DILUTION

Skin corrosion : Category 1A
 Serious eye damage : Category 1

GHS label elements
Product AS SOLD

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**
 Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

SAFETY DATA SHEET

LIME-A-WAY

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Product AT USE DILUTION

Hazard pictograms :



Signal Word :

Danger

Hazard Statements :

Causes severe skin burns and eye damage.

Precautionary Statements :

Prevention:

Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Product AS SOLD

Other hazards :

Do not mix with bleach or other chlorinated products – will cause chlorine gas.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture :

Mixture

Chemical name

nitric acid

citric acid

CAS-No.

7697-37-2

77-92-9

Concentration (%)

10 - 30

1 - 5

Product AT USE DILUTION

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

Product AS SOLD

In case of eye contact :

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact :

Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean

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LIME-A-WAY

	shoes before reuse. Get medical attention immediately.
If swallowed	: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	: Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
Protection of first-aiders	: If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Notes to physician	: Treat symptomatically.
Most important symptoms and effects, both acute and delayed	: See Section 11 for more detailed information on health effects and symptoms.

Product AT USE DILUTION

In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
In case of skin contact	: Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
If swallowed	: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	: Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

SECTION 5. FIRE-FIGHTING MEASURES

Product AS SOLD

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	: None known.
Specific hazards during fire fighting	: Not flammable or combustible.
Hazardous combustion products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx)
Special protective equipment for fire-fighters	: Use personal protective equipment.
Specific extinguishing methods	: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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LIME-A-WAY

Product AS SOLD

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE

Product AS SOLD

Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not mix with bleach or other chlorinated products – will cause chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

Conditions for safe storage : Keep away from strong bases. Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : 0 °C to 50 °C

Product AT USE DILUTION

Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

SAFETY DATA SHEET

LIME-A-WAY

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Ingredients with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Nitric acid	7697-37-2	TWA	2 ppm	ACGIH
		STEL	4 ppm	ACGIH
		STEL	4 ppm 10 mg/m ³	NIOSH REL
		TWA	2 ppm 5 mg/m ³	NIOSH REL
		TWA	2 ppm 5 mg/m ³	OSHA Z1

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Wear eye protection/ face protection.

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Product AT USE DILUTION

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Wear eye protection/ face protection.

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

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LIME-A-WAY

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: Aqueous solution	liquid
Color	: clear, green	green
Odor	: odorless	odorless
pH	: 0.5, (100 %)	1.21 - 2.06
Flash point	: Not applicable	
Odor Threshold	: No data available	
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: 100 °C	
Evaporation rate	: No data available	
Flammability (solid, gas)	: No data available	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapor pressure	: No data available	
Relative vapor density	: No data available	
Relative density	: 1.03 - 1.11	
Water solubility	: No data available	
Solubility in other solvents	: No data available	
Partition coefficient: n-octanol/water	: No data available	
Autoignition temperature	: No data available	
Thermal decomposition	: No data available	
Viscosity, kinematic	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: The substance or mixture is not classified as oxidizing.	
Molecular weight	: No data available	
VOC	: No data available	

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid	: None known.
Incompatible materials	: Bases

SAFETY DATA SHEET

LIME-A-WAY

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:
Carbon oxides
Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Product AS SOLD

Eyes : Causes serious eye damage.
Skin : Causes severe skin burns.
Ingestion : Causes digestive tract burns.
Inhalation : May cause nose, throat, and lung irritation.
Chronic Exposure : Health injuries are not known or expected under normal use.

Product AT USE DILUTION

Eyes : Causes serious eye damage.
Skin : Causes severe skin burns.
Ingestion : Causes digestive tract burns.
Inhalation : May cause nose, throat, and lung irritation.
Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD

Eye contact : Redness, Pain, Corrosion
Skin contact : Redness, Pain, Corrosion
Ingestion : Corrosion, Abdominal pain
Inhalation : Respiratory irritation, Cough

Product AT USE DILUTION

Eye contact : Redness, Pain, Corrosion
Skin contact : Redness, Pain, Corrosion
Ingestion : Corrosion, Abdominal pain
Inhalation : Respiratory irritation, Cough

Toxicity

Product AS SOLD

Product
Acute oral toxicity : No data available

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Acute inhalation toxicity : No data available
Acute dermal toxicity : No data available
Skin corrosion/irritation : No data available
Serious eye damage/eye irritation : No data available
Respiratory or skin sensitization : No data available
Carcinogenicity : No data available
Reproductive effects : No data available
Germ cell mutagenicity : No data available
Teratogenicity : No data available
STOT-single exposure : No data available
STOT-repeated exposure : No data available
Aspiration toxicity : No data available

Components

Acute oral toxicity : citric acid
LD50 Rat: 11,700 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : No data available
Toxicity to daphnia and other aquatic invertebrates : No data available
Toxicity to algae : No data available

Components

Toxicity to fish : nitric acid
96 h LC50: 72 mg/l

citric acid
96 h LC50 Fish: > 100 mg/l

Persistence and degradability

Product AS SOLD

Readily biodegradable.

Product AT USE DILUTION

Readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

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No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste : D002 (Corrosive)

Product AT USE DILUTION

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

UN number : 3264
Description of the goods : Corrosive liquid, acidic, inorganic, n.o.s.
(Nitric acid, Citric acid)
Class : 8
Packing group : II
Environmentally hazardous : no

Sea transport (IMDG/IMO)

UN number : 3264
Description of the goods : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Nitric acid, Citric acid)
Class : 8
Packing group : II
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

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LIME-A-WAY

Product AS SOLD

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
nitric acid	7697-37-2	1000	9950

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
nitric acid	7697-37-2	1000	9950

SARA 311/312 Hazards : Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:
nitric acid 7697-37-2 10 - 20 %

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:
nitric acid 7697-37-2 10 - 20 %

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California Cleaning Product Right to Know Act of 2017 (SB 258)

This regulation applies to this product.

Chemical Name	CAS-No.	Function	List(s)
water	7732-18-5	Diluent	Not Applicable
nitric acid	7697-37-2	Cleaning Agent	20
citric acid	77-92-9	Cleaning Agent	Not Applicable
Phosphoric acid	7664-38-2	Cleaning Agent	20
Nonionic surfactant	Withheld	Cleaning Agent	Not Applicable
Colorant	Withheld	Dye	Not Applicable
Colorant	Withheld	Dye	Not Applicable

*refer to ecolab.com/sds for electronic links to designated lists

The ingredients of this product are reported in the following inventories:

United States TSCA Inventory :

All substances listed as active on the TSCA inventory

Canadian Domestic Substances List (DSL) :

This product contains one or several components listed in the Canadian NDSL.

Australia Inventory of Chemical Substances (AICS) :

On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemical Substances :

not determined

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LIME-A-WAY

Japan. ENCS - Existing and New Chemical Substances Inventory :

On the inventory, or in compliance with the inventory

Korea. Korean Existing Chemicals Inventory (KECI) :

On the inventory, or in compliance with the inventory

Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances in China (IECSC) :

On the inventory, or in compliance with the inventory

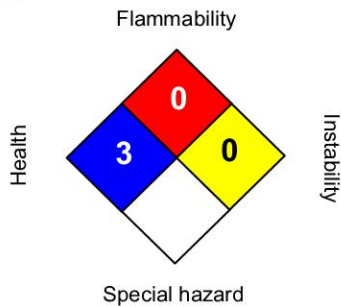
Taiwan Chemical Substance Inventory (TCSI) :

On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Product AS SOLD

NFPA:



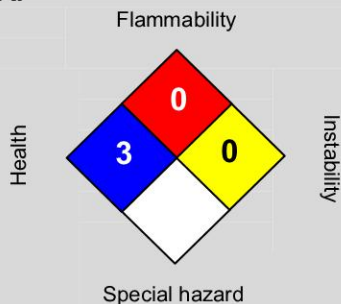
HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Product AT USE DILUTION

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Issuing date : 09/23/2019
Version : 1.10
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a

SAFETY DATA SHEET

LIME-A-WAY

guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



SAFETY DATA SHEET

Page : 1

Revised edition no : 3

Date : 17 / 3 / 2015

Supersedes : 6 / 11 / 2014

LINPOL GREEN AD

0202899

Produced by

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12 Bartlett Road
Gorham , Maine 04038
United States of America
tél : 0 877 854 0072
fax : 0 207 856 0001
In case of emergency : Info Trac 1-800-535-5053

SECTION 1. Identification of the substance/mixture and of the company/undertaking

Identification of the product : Liquid.
Use : Industrial and institutional detergent
See product bulletin for detailed information.
Company identification : See distributor.
Name and function of the responsible person : adress email : msds@pollet.eu
tél 0032 69 553 893 or 883
Laboratory of Pollet S.A.

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

H315 - Causes skin irritation
H319 - Causes serious eye irritation

2.2. Label elements

Labelling Regulation EC 1272/2008 (CLP)

• Hazard pictograms



• Hazard pictograms : SGH07
• Signal words : Warning
• Hazard statements : H315 - Causes skin irritation
H319 - Causes serious eye irritation

• Precautionary statements

Prevention : P337+P313 - If eye irritation persists: Get medical advice/attention
P 280 - Wear protective gloves, eye protection

2.3. Other hazards

Other hazards : None under normal conditions.

SECTION 3. Composition/information on ingredients

3.1./3.2. Substance / Preparation

Substance / Preparation : Preparation.

This product is considered to be hazardous and contains hazardous components.

Substance name	Contents	CAS No	EC No	Index No	REACH	Classification
Fatty acid of vegetable oil(C14-C22) potassic salt	> 5 <= 15 %	61788-65-6	262-993-9	----	----	Xi: R36/38 Eye Irrit. 2;H319 Skin Irrit. 2;H315
Fatty acid (C12-C14) potassic salt	> 5 <= 15 %	61789-30-8	----	----	----	Xi: R36/38 Eye Irrit. 2;H319 Skin Irrit. 2;H315

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SAFETY DATA SHEET

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Date : 17 / 3 / 2015

Supersedes : 6 / 11 / 2014

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SECTION 3 Composition/Information on ingredients (continued)

Composition of detergents : 15% - 30% : - Soap
Perfumes

SECTION 4. First aid measures

- Skin contact : Rinse immediately with plenty of water. Seek medical attention if irritation develops.
- Eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Ingestion : Rinse mouth. Seek medical advice.

SECTION 5. Firefighting measures

Extinguishing media
- Suitable extinguishing media : Carbon dioxide.
Dry chemical.
Water spray.
- Unsuitable extinguishing media : Use of heavy stream of water may spread fire.
Flammable class : Not flammable.
Protection against fire : Wear proper protective equipment.
Special procedures : Exercise caution when fighting any chemical fire.

SECTION 6. Accidental release measures

Personal precautions : Spill area may be slippery.
Equip cleanup crew with proper protection.
Environmental precautions : Prevent entry to sewers and public waters.
Does not disturb the water treatment stations.
Clean up methods : Clean up any spills as soon as possible, using an absorbent material to collect it.
Use suitable disposal containers.
Flush with plenty of water.

SECTION 7. Handling and storage

Handling : Handle with good industrial hygiene and safety procedures.
Ensure prompt removal from eyes, skin and clothing.
Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.
General : Avoid all unnecessary exposure.
Storage : Keep container closed when not in use.
Store at room temperature.

SECTION 8. Exposure controls/personal protection

Personal protection
- Hand protection : In case of repeated or prolonged contact wear gloves.
- Eye protection : Chemical goggles or safety glasses.
- Ingestion : When using, do not eat, drink or smoke.

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SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

9.1.a. Appearance

Appearance : Liquid.
Colour : Slightly yellow.

9.1.b. Odour

Odour : Citronella

9.1.d. pH

pH value (concentrated product) : > 12.5
pH value in distilled water : 10 +/- 0.5

9.1.m. Relative density

Density [kg/m³] : 1017 +/- 5

9.1.n. Solubility

Solubility in water : Complete.

9.1.r. Viscosity

Viscosity at 20°C [mPa.s] : 15 - 40

9.2. Other information

Other data : See Heading : Information on ingredients.

SECTION 10. Stability and reactivity

Hazardous reactions : None under normal conditions.

Materials to avoid : Do not mix with other product.
Acids.
Oxidizing agent.

Hazardous decomposition products : None under normal conditions.

Hazardous properties : None under normal conditions.

SECTION 11. Toxicological information

On product : No data available.

SECTION 12. Ecological information

On product : product replying to the EU Ecolabel as all-purpose cleaner (2011/383/UE)

On ingredients : The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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LINPOL GREEN AD**0202899****SECTION 13. Disposal considerations**

General : Dispose in a safe manner in accordance with local/national regulations.
The product at use concentration may be flushed in a sewer.

SECTION 14. Transport information

General information : Not regulated.

SECTION 15. Regulatory information**EC Labelling**

France : Tableaux des maladies professionnelles prévus à l'article R, 461-3 du code du travail

Chart of occupational diseases, according to French Labor Code : not applicable

Other : N° douanier/custom duties N°:34012090

Ensure all national/local regulations are observed.

EC Classification : Xi; R36/38

Symbol(s) : Xi : Irritant

R Phrase(s) : R36/38 : Irritating to eyes and skin.

S Phrase(s) : S2 : Keep out of the reach of children.
S50 : Do not mix with other product.

SECTION 16. Other information

R sentences relative to raw materials mentioned in section 3 : R36/38 : Irritating to eyes and skin.

Print date : 8 / 5 / 2015

The contents and format of this SDS are in accordance with REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL.

The information in this SDS was either obtained from measurements either calculated or retrieved from sources which we believe to be reliable. However, we cannot guarantee the completeness and absence of errors concerning the information supplied by external sources. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

End of document**Pollet S.A.**

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1. Identification

Product identifier	Liquid Wrench Silicone Spray		
Other means of identification			
SDS number	M914		
Part No.	M914, M914/6, M914/4		
Tariff code	3403.19.1000		
Recommended use	Lubricant		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/Distributor information			
Manufacturer			
Company name	RSC Chemical Solutions		
Address	600 Radiator Road Indian Trail, NC 28079 United States		
Telephone	Customer Service:	(704) 821-7643	
	Technical:	(704) 684-1811	
Website	www.rscbrands.com		
E-mail	Not available.		
Emergency phone number	Emergency Telephone:	(303) 623-5716	
	Emergency Contact:	RMPDC (877-740-5015)	

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, dermal	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2B
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1B
	Reproductive toxicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	

Label elements



Signal word Danger

Hazard statement Flammable aerosol. Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes eye irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Combustible.
Supplemental information	80.88% of the mixture consists of component(s) of unknown acute dermal toxicity. 61.8% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 58.87% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Stoddard Solvent		8052-41-3	60 - < 70
Low Odor Base Solvent		64742-47-8	10 - < 20
1000 cSt Silicone		63148-62-9	5 - < 10
Distillates (petroleum), Hydrotreated Heavy Naphthenic		64742-52-5	5 - < 10
Carbon Dioxide		124-38-9	3 - < 5
Trimethylbenzene		25551-13-7	3 - < 5
ETHYLBENZENE		100-41-4	1 - < 3
BENZENE,1-METHYLETHYL-		98-82-8	< 1
Other components below reportable levels			1 - < 3

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media Powder. Alcohol resistant foam. Dry chemicals. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire fighting equipment/instructions Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

General fire hazards Flammable aerosol. Combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Refer to attached safety data sheets and/or instructions for use. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Level 2 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
BENZENE, 1-METHYLETHYL- (CAS 98-82-8)	PEL	245 mg/m ³	
Carbon Dioxide (CAS 124-38-9)	PEL	50 ppm 9000 mg/m ³	
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	PEL	5000 ppm 5 mg/m ³	Mist.
ETHYLBENZENE (CAS 100-41-4)	PEL	2000 mg/m ³ 500 ppm 435 mg/m ³	
Stoddard Solvent (CAS 8052-41-3)	PEL	100 ppm 2900 mg/m ³ 500 ppm	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
BENZENE, 1-METHYLETHYL- (CAS 98-82-8)	TWA	50 ppm	
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm	
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	TWA TWA	5000 ppm 5 mg/m ³	Inhalable fraction.
ETHYLBENZENE (CAS 100-41-4)	TWA	20 ppm	
Stoddard Solvent (CAS 8052-41-3)	TWA	100 ppm	
Trimethylbenzene (CAS 25551-13-7)	TWA	25 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
BENZENE, 1-METHYLETHYL- (CAS 98-82-8)	TWA	245 mg/m ³	
Carbon Dioxide (CAS 124-38-9)	STEL	50 ppm 54000 mg/m ³	
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	TWA	30000 ppm 9000 mg/m ³ 5000 ppm 1800 mg/m ³	
ETHYLBENZENE (CAS 100-41-4)	Ceiling		
	STEL	10 mg/m ³	Mist.
	STEL	545 mg/m ³	
	TWA	125 ppm 435 mg/m ³ 100 ppm	
Low Odor Base Solvent (CAS 64742-47-8)	TWA	100 mg/m ³	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Stoddard Solvent (CAS 8052-41-3)	Ceiling	1800 mg/m ³	
	TWA	350 mg/m ³	

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
ETHYLBENZENE (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*

* - For sampling details, please see the source document.

Exposure guidelines**US - California OELs: Skin designation**

BENZENE, 1-METHYLETHYL- (CAS 98-82-8) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

BENZENE, 1-METHYLETHYL- (CAS 98-82-8) Skin designation applies.

US - Tennessee OELs: Skin designation

BENZENE, 1-METHYLETHYL- (CAS 98-82-8) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

BENZENE, 1-METHYLETHYL- (CAS 98-82-8) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

BENZENE, 1-METHYLETHYL- (CAS 98-82-8) Can be absorbed through the skin.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Clear. Liquid.

Physical state

Liquid.

Form

Aerosol.

Color

Pale yellow

Odor

Petroleum

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

-94 °F (-70 °C) estimated

Initial boiling point and boiling range

302 °F (150 °C) estimated

Flash point

117.0 °F (47.2 °C)

Evaporation rate

Not available.

Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.7 % estimated
Flammability limit - upper (%)	6 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	1.72 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	410 °F (210 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	6.80 lbs/gal
Explosive properties	Not explosive.
Flame extension	25 in
Flammability (flash back)	No
Flammability class	Combustible II estimated
Heat of combustion (NFPA 30B)	29.06 kJ/g estimated
Moisture	< 0.03 %
Oxidizing properties	Not oxidizing.
Percent volatile	1.64 % estimated
Specific gravity	0.82
VOC (Weight %)	58.5 % w/w

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
Skin contact	Harmful in contact with skin. Causes skin irritation.
Eye contact	Causes eye irritation.
Ingestion	Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Headache. May cause drowsiness and dizziness. Nausea, vomiting. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Harmful in contact with skin. Harmful if swallowed. Narcotic effects.

Components	Species	Test Results
-------------------	----------------	---------------------

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Acute

Inhalation

LC50	Mouse	2000 ppm, 7 Hours 24.7 mg/l, 2 Hours
	Rat	8000 ppm, 4 Hours

Oral

LD50	Rat	1400 mg/kg
------	-----	------------

ETHYLBENZENE (CAS 100-41-4)

Acute

Dermal

LD50	Rabbit	17800 mg/kg
------	--------	-------------

Oral

LD50	Rat	3500 mg/kg
------	-----	------------

Trimethylbenzene (CAS 25551-13-7)

Acute

Oral

LD50	Rat	8970 mg/kg
------	-----	------------

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity May cause genetic defects.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

BENZENE,1-METHYLETHYL- (CAS 98-82-8)	2B Possibly carcinogenic to humans.
ETHYLBENZENE (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Stoddard Solvent (CAS 8052-41-3)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5) Known To Be Human Carcinogen.

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Specific target organ toxicity - single exposure May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components	Species	Test Results
1000 cSt Silicone (CAS 63148-62-9)		
Aquatic		
Fish	LC50	Channel catfish (<i>Ictalurus punctatus</i>) 2.36 - 4.15 mg/l, 96 hours
BENZENE,1-METHYLETHYL- (CAS 98-82-8)		
Aquatic		
Crustacea	EC50	Brine shrimp (<i>Artemia</i> sp.) 3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 2.7 mg/l, 96 hours
ETHYLBENZENE (CAS 100-41-4)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 7.5 - 11 mg/l, 96 hours
Low Odor Base Solvent (CAS 64742-47-8)		
Aquatic		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 2.9 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

BENZENE,1-METHYLETHYL-ETHYLBENZENE	3.66
Stoddard Solvent	3.15
	3.16 - 7.15

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. Transport information

DOT

UN number	Not available.
UN proper shipping name	Consumer Commodity
Transport hazard class(es)	
Class	ORM-D
Subsidiary risk	-
Label(s)	3
Packing group	Not applicable.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB2, T4, TP1
Packaging exceptions	150
Packaging non bulk	202

Packaging bulk 242

IATA

UN number UN1950

UN proper shipping name Aerosol, flammable

Transport hazard class(es)

Class 2

Subsidiary risk -

Packing group Not applicable.

Environmental hazards No.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Forbidden.

Cargo aircraft only Forbidden.

IMDG

UN number UN1950

UN proper shipping name Aerosols

Transport hazard class(es)

Class 2

Subsidiary risk -

Packing group Not applicable.

Environmental hazards

Marine pollutant No.

EmS F-D, S-U

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

IATA; IMDG



15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

BENZENE, 1-METHYLETHYL- (CAS 98-82-8) Listed.

ETHYLBENZENE (CAS 100-41-4) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes

Delayed Hazard - Yes

Fire Hazard - Yes

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
ETHYLBENZENE	100-41-4	1 - < 3
BENZENE,1-METHYLETHYL-	98-82-8	< 1

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

ETHYLBENZENE (CAS 100-41-4)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)

ETHYLBENZENE (CAS 100-41-4)

Low Odor Base Solvent (CAS 64742-47-8)

Stoddard Solvent (CAS 8052-41-3)

Trimethylbenzene (CAS 25551-13-7)

US. Massachusetts RTK - Substance List

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Carbon Dioxide (CAS 124-38-9)

Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)

ETHYLBENZENE (CAS 100-41-4)

Low Odor Base Solvent (CAS 64742-47-8)

Stoddard Solvent (CAS 8052-41-3)

Trimethylbenzene (CAS 25551-13-7)

US. New Jersey Worker and Community Right-to-Know Act

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Carbon Dioxide (CAS 124-38-9)

ETHYLBENZENE (CAS 100-41-4)

Low Odor Base Solvent (CAS 64742-47-8)

Stoddard Solvent (CAS 8052-41-3)

Trimethylbenzene (CAS 25551-13-7)

US. Pennsylvania Worker and Community Right-to-Know Law

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Carbon Dioxide (CAS 124-38-9)

ETHYLBENZENE (CAS 100-41-4)

Low Odor Base Solvent (CAS 64742-47-8)

Stoddard Solvent (CAS 8052-41-3)

Trimethylbenzene (CAS 25551-13-7)

US. Rhode Island RTK

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

ETHYLBENZENE (CAS 100-41-4)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Listed: April 6, 2010

ETHYLBENZENE (CAS 100-41-4)

Listed: June 11, 2004

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	06-01-2015
Version #	01
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision Information	Product and Company Identification: Product Uses Composition / Information on Ingredients: Ingredients Transport Information: Material Transportation Information Regulatory Information: TSCA 12b Exported Products HazReg Data: International Inventories GHS: Classification

SAFETY DATA SHEET
LIQUITEX MEDIUM VERNIS BRILLANT / GLOSS MEDIUM & VARNISH
According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification**Product Identifier**

Product name LIQUITEX MEDIUM VERNIS BRILLANT / GLOSS MEDIUM & VARNISH

Recommended use of the chemical and restrictions on use

Application Medium for Acrylic Painting

Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier ColArt Americas Inc.
11 Constitution Avenue
Piscataway
New Jersey 08855 - 1396
USA
1-732-562-0770
R.Enquiries@colart.co.uk

Contact Person Regulatory Manager

Manufacturer**Emergency telephone number**

Emergency telephone For health information only call 1-800-628-3385 Piscataway NJ 08855.

2. Hazard(s) identification**Classification of the substance or mixture**

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

Label elements

Hazard statements NC Not Classified

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients**Mixtures**

Composition comments Any hazardous ingredients are below classification limit.

4. First-aid measures**Description of first aid measures**

General information If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

Inhalation No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues.

LIQUITEX MEDIUM VERNIS BRILLANT / GLOSS MEDIUM & VARNISH

Ingestion	No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.
Skin Contact	No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.
Eye contact	Rinse with water. Get medical attention if any discomfort continues.
Protection of first aiders	Use protective equipment appropriate for surrounding materials.

Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known. Spray/mists may cause respiratory tract irritation.
Ingestion	No specific symptoms known. May cause discomfort if swallowed.
Skin contact	No specific symptoms known. May cause discomfort.
Eye contact	No specific symptoms known. May be slightly irritating to eyes.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
Specific treatments	No special treatment required.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	No specific recommendations. For personal protection, see Section 8.
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Environmental precautions

Environmental precautions	Avoid discharge into drains or watercourses or onto the ground.
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Methods and material for containment and cleaning up

LIQUITEX MEDIUM VERNIS BRILLANT / GLOSS MEDIUM & VARNISH

Methods for cleaning up Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

Reference to other sections For personal protection, see Section 8.

7. Handling and storage

Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions No specific recommendations.

Storage class Unspecified storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

8. Exposure Controls/personal protection

Exposure controls

Appropriate engineering controls No specific ventilation requirements.

Eye/face protection No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection No specific hand protection recommended.

Other skin and body protection No specific recommendations

Hygiene measures Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

Respiratory protection No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls Not regarded as dangerous for the environment.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance Liquid

Color White.

Odor Characteristic.

pH pH (concentrated solution): 9-10

LIQUITEX MEDIUM VERNIS BRILLANT / GLOSS MEDIUM & VARNISH

Initial boiling point and range	> 100°C @ 760 mm Hg
Vapour density	> 1
Relative density	1.1 @ 20°C
Solubility(ies)	Miscible with water
Other information	Not available.

10. Stability and reactivity

Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

11. Toxicological information

Information on toxicological effects

Toxicological effects	Not regarded as a health hazard under current legislation.
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	

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Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.
General information	No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known. Spray/mists may cause respiratory tract irritation.
Ingestion	No specific symptoms known. May cause discomfort if swallowed.
Skin Contact	No specific symptoms known. May cause discomfort.
Eye contact	No specific symptoms known. May be slightly irritating to eyes.
Acute and chronic health hazards	No specific health hazards known.
Route of entry	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.
Medical Symptoms	Irritation of eyes and mucous membranes.

12. Ecological Information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Toxicity

Toxicity Based on available data the classification criteria are not met.

Acute toxicity - fish Not determined.

Acute toxicity - aquatic invertebrates Not determined.

Acute toxicity - aquatic plants Not determined.

Acute toxicity - microorganisms Not determined.

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Bioaccumulative potential

LIQUITEX MEDIUM VERNIS BRILLANT / GLOSS MEDIUM & VARNISH

Bio-Accumulative Potential No data available on bioaccumulation.

Mobility in soil

Mobility No data available.

Adsorption/desorption coefficient Not determined.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

General information The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class 08 01 12 waste paint and varnish other than those mentioned in 08 01 11

14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DoT).

UN Number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

LIQUITEX MEDIUM VERNIS BRILLANT / GLOSS MEDIUM & VARNISH

Regulatory Status

This product has been evaluated by a toxicologist and labelled for acute and chronic health hazards in accordance with the Labelling of Hazardous Art Materials Regulation and Federal Regulation 16 CFR 1500.14 of the Federal Hazardous Substances Act. This product conforms to ASTM D-4236 Standard Practice for Labelling Art Materials for Chronic Adverse health effects.

This product has been certified by ACMI (Artists Craft Material Institute, Inc.) to carry the AP (Approved Product) Seal, meaning this product bears no chronic or acute human health hazards.

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed or exempt.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

None of the ingredients are listed or exempt.

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

California Directors List of Hazardous Substances

None of the ingredients are listed or exempt.

Massachusetts "Right To Know" List

None of the ingredients are listed or exempt.

Rhode Island "Right To Know" List

None of the ingredients are listed or exempt.

LIQUITEX MEDIUM VERNIS BRILLANT / GLOSS MEDIUM & VARNISH

Minnesota "Right To Know" List

None of the ingredients are listed or exempt.

New Jersey "Right To Know" List

None of the ingredients are listed or exempt.

Pennsylvania "Right To Know" List

None of the ingredients are listed or exempt.

Inventories**US - TSCA**

None of the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

16. Other information

Training advice	Read and follow manufacturer's recommendations.
Revision date	7/31/2015
Revision	4
Supersedes date	3/30/2015

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



SDS #: 459

Revision Date: February 6, 2014

Litmus Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Litmus

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
 Chemtrec Emergency Phone Number: (800) 424-9941

Signal Word
N/A

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard.
 Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible.
 Prudent laboratory practices should be observed.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Litmus	1393-92-6	Unspecified	Unspecified	
Synonyms: Lichen blue				

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA Code
None established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete.
 See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #9. Store with dyes, indicators and stains.

Moisture sensitive material. Keep container tightly closed. Store in a cool, dry place within a Flinn Chem-Saf™ bag.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Dark-purple powder. Odor of decaying plant.

pH indicator: 4.5 red to 8.3 blue.

Soluble: Water

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers.

Shelf life: Indefinite, if stored properly. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: N.A.

SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

SECTION 15 — REGULATORY INFORMATION

EINECS-listed (215-739-6).

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

Revision Date: February 6, 2014

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List) Code Number	Product Name Living Colors Tempera Paint (all colors)
Section I	
Manufacturer's Name Chroma Acrylics, Inc.	Emergency Telephone Number 717-626-8866
Address (Number, Street, City, State, and ZIP Code) 205 Bucky Drive Litz, PA 17543	Telephone Number for Information 717-626-8866
Vendor # 37040	Date Prepared 2/1/92
	Reviewed 5/92
	Signature of Preparer (optional)

Section II--Hazardous Ingredients/Identity Information

Hazardous Components	CAS	DOT	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
No Hazardous Ingredients						75-82
Water						
Various, Asst. color pigments						Non-Toxic
Calcium Carbonate						
Acrylic Thickeners: Either ASE 60						
Dispersant						
Nuosept						Non-toxic

SECTION IIa-Non Toxic Certification

CP Seal Yes	Waterbased, non-toxic, non-hazardous tempera colors in liquid form.
AP Seal Not known	
ASTM D4236 Not known	

Section III--Physical/Chemical Characteristics

Boiling Point	215-275 F	Specific Gravity (H ₂ O = 1)	Not known
Vapor Pressure (mm Hg)	Not known	Melting Point	Not known
Vapor Density (AIR = 1)	Lighter than air	Evaporation Rate (Butyl Acetate = 1)	Slower than ether
Solubility in Water	Totally soluble		
Appearance and Odor	Liquid water based tempera paints in assorted colors		

Section IV--Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits	LEL Unknown	UEL Unknown
Extinguishing Media N/A			
Special Fire Fighting Procedures: N/A			

Unusual Fire and Explosion Hazards
None

(Reproduce locally)

Section V--Reactivity Data

- 2 -

Living Colors Tempura Paint (all colors)

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Stability	Unstable		Conditions to Avoid None known
	Stable	X	

Incompatibility (Materials to Avoid) None Known

Hazardous Decomposition or Byproducts None

Hazardous Polymerization	May Occur		Conditions to Avoid None known
	Will Not Occur	X	

Section VI--Health Hazard Data

Route(s) of Entry: Inhalation? N/A Skin? N/A Ingestion? N/A

Health Hazards (Acute and Chronic)

Non-toxic, Non-hazardous. Certified by a toxicologist in association w/ the Art & Craft Materials Institute.

Carcinogenicity: NIP? IARC Monographs? OSHA Regulated?

Signs and Symptoms of Exposure
None knownMedical Conditions Generally Aggravated by Exposure
NoneEmergency and First Aid Procedures
None**Section VII--Precautions for Safe Handling and Use**

Steps to Be Taken in Case Material is Released or Spilled

Dike and contain spill w/ inert materials and transfer contents to containers for disposal.

Waste Disposal Method

Dispose of in accordance w/ state, local, and federal regulations.

Precautions to Be Taken in Handling and Storing
None

Other Precautions None

Section VIII--Control Measures

Respiratory Protection (Specify Type) None

Ventilation	Local Exhaust None	Special None
	Mechanical (General) None	Other None
Protective Gloves None	Eye Protection None	

Other Protective Clothing or Equipment
None

Work/Hygienic Practices Clean, safe work environment

SAFETY DATA SHEET



Date of issue/Date of revision : 1 April 2017
Version 8

Section 1. Identification

Product name : LN-601 PROJECTS AHE60112TN0
Product code : 00407662
Other means of identification : Not available.
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications.
Use of the substance/ mixture : Adhesive.
Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)

Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2
GERM CELL MUTAGENICITY - Category 1
CARCINOGENICITY - Category 1A
TOXIC TO REPRODUCTION (Fertility) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 34.3%

GHS label elements

Hazard pictograms :



Signal word : Danger

Section 2. Hazards identification

- Hazard statements** : Highly flammable liquid and vapor.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility.
May cause damage to organs through prolonged or repeated exposure.
- Precautionary statements**
- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Do not breathe vapor.
- Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- Storage** : Store locked up. Store in a well-ventilated place. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.
- Hazards not otherwise classified** : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Product name** : LN-601 PROJECTS AHE60112TN0

Ingredient name	%	CAS number
kaolin	≥20 - ≤50	1332-58-7
Distillates (petroleum), light distillate hydrotreating process, low-boiling	≥20 - ≤50	68410-97-9
Limestone	≥10 - ≤20	1317-65-3
cyclohexane	≥5.0 - <10	110-82-7
n-hexane	<1.0	110-54-3
titanium dioxide	≤1.0	13463-67-7
crystalite (<10 microns)	<1.0	14464-46-1
crystalline silica, respirable powder (<10 microns)	<1.0	14808-60-7
crystalline silica, respirable powder (>10 microns)	≤1.0	14808-60-7

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
dryness
cracking
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Section 4. First aid measures

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon oxides
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Section 6. Accidental release measures

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Special precautions : Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Kaolin	<p>ACGIH TLV (United States, 3/2016). TWA: 2 mg/m³ 8 hours. Form: Respirable fraction</p> <p>OSHA PEL (United States, 6/2016). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction</p>
Distillates (petroleum), light distillate hydrotreating process, low-boiling	<p>OSHA PEL (United States). TWA: 15 mg/m³ 8 hours. Form: Total dust</p>
Limestone	<p>OSHA PEL (United States, 6/2016). TWA: 500 ppm</p>
cyclohexane	<p>OSHA PEL (United States, 6/2016). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction</p> <p>TWA: 15 mg/m³ 8 hours. Form: Total dust</p> <p>ACGIH TLV (United States, 3/2016). TWA: 100 ppm 8 hours.</p> <p>OSHA PEL (United States, 6/2016). TWA: 1050 mg/m³ 8 hours. TWA: 300 ppm 8 hours.</p>
n-hexane	<p>ACGIH TLV (United States, 3/2016). Absorbed through skin. TWA: 50 ppm 8 hours.</p> <p>OSHA PEL (United States, 6/2016). TWA: 1800 mg/m³ 8 hours. TWA: 500 ppm 8 hours.</p>
titanium dioxide	<p>OSHA PEL (United States, 6/2016). TWA: 15 mg/m³ 8 hours. Form: Total dust</p> <p>ACGIH TLV (United States, 3/2016). TWA: 10 mg/m³ 8 hours.</p>
cristobalite (<10 microns)	<p>OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / 2 x (%SiO₂+5) 8 hours. Form: Respirable TWA: 10 mg/m³ / 2 x (%SiO₂+2) 8 hours. Form: Respirable TWA: 30 mg/m³ / 2 x (%SiO₂+2) 8 hours. Form: Total dust</p> <p>OSHA PEL (United States, 6/2016).</p>

Section 8. Exposure controls/personal protection

crystalline silica, respirable powder (<10 microns)

TWA: 50 µg/m³ 8 hours. Form: Respirable dust

ACGIH TLV (United States, 3/2016).

TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction

ACGIH TLV (United States, 3/2016).

TWA: 0.025 mg/m³ 8 hours. Form: Respirable

OSHA PEL Z3 (United States, 6/2016).

TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form: Respirable

TWA: 250 mppcf / (%SiO2+5) 8 hours. Form: Respirable

OSHA PEL (United States, 6/2016).

TWA: 50 µg/m³ 8 hours. Form: Respirable dust

ACGIH TLV (United States, 3/2016).

TWA: 0.025 mg/m³ 8 hours. Form: Respirable

OSHA PEL Z3 (United States, 6/2016).

TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form: Respirable

TWA: 250 mppcf / (%SiO2+5) 8 hours. Form: Respirable

OSHA PEL (United States, 6/2016).

TWA: 50 µg/m³ 8 hours. Form: Respirable dust

OSHA PEL Z3 (United States).

TWA: 30 mg/m³ Form: Total dust

crystalline silica, respirable powder (>10 microns)

Key to abbreviations

- A = Acceptable Maximum Peak
- ACGIH = American Conference of Governmental Industrial Hygienists.
- C = Ceiling Limit
- F = Fume
- IPEL = Internal Permissible Exposure Limit
- OSHA = Occupational Safety and Health Administration.
- R = Respirable
- Z = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

- S = Potential skin absorption
- SR = Respiratory sensitization
- SS = Skin sensitization
- STEL = Short term Exposure limit values
- TD = Total dust
- TLV = Threshold Limit Value
- TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Section 8. Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety glasses with side shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Tan.
- Odor** : Hydrocarbon.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Closed cup: -16°C (3.2°F)
- Material supports combustion.** : Yes.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.

Section 9. Physical and chemical properties

Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Evaporation rate	: 1.5 (butyl acetate = 1)
Vapor pressure	: 3.2 kPa (24 mm Hg) [room temperature]
Vapor density	: Not available.
Relative density	: 1.18
Density (lbs / gal)	: 9.85
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.21 cm ² /s (>21 cSt)
Volatility	: 56% (v/v), 34.373% (w/w)
% Solid. (w/w)	: 65.627

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Kaolin Distillates (petroleum), light distillate hydrotreating process, low-boiling cyclohexane n-hexane titanium dioxide	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	5.17 g/kg	-
	LD50 Oral	Rat	6240 mg/kg	-
	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LD50 Oral	Rat	15840 mg/kg	-
	LD50 Oral	Rat	>11 g/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself.
Eyes : There are no data available on the mixture itself.
Respiratory : There are no data available on the mixture itself.

Sensitization

Conclusion/Summary

Skin : There are no data available on the mixture itself.
Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-
crystalite (<10 microns)	-	1	Known to be a human carcinogen.
crystalline silica, respirable powder (<10 microns)	-	1	Known to be a human carcinogen.
crystalline silica, respirable powder (>10 microns)	-	1	Known to be a human carcinogen.

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Name	Category
cyclohexane	Category 3
n-hexane	Category 3

Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)

Name	Category
cyclohexane	Category 2
n-hexane	Category 2
crystaline silica (<10 microns)	Category 1
crystalline silica, respirable powder (<10 microns)	Category 1

Target organs : Contains material which causes damage to the following organs: brain, eyes, central nervous system (CNS).
 Contains material which may cause damage to the following organs: lungs, cardiovascular system, upper respiratory tract, skin, stomach.

Aspiration hazard

Name	Result
Distillates (petroleum), light distillate hydrotreating process, low-boiling	ASPIRATION HAZARD - Category 1
cyclohexane	ASPIRATION HAZARD - Category 1
n-hexane	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
 irritation
 dryness
 cracking
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Section 11. Toxicological information

Conclusion/Summary : There are no data available on the mixture itself. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Long term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

General : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : May cause genetic defects.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
cyclohexane	3.44	83.18	low
n-hexane	3.9	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	IMDG	IATA
UN number	UN1133	UN1133	UN1133
UN proper shipping name	ADHESIVES	ADHESIVES	ADHESIVES
Transport hazard class (es)	3	3	3
Packing group	II	II	II
Environmental hazards	No.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Marine pollutant substances	Not applicable.	(cyclohexane)	Not applicable.
Product RQ (lbs)	14478.1	Not applicable.	Not applicable.
RQ substances	(cyclohexane)	Not applicable.	Not applicable.

14. Transport information

Additional information

- DOT** : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are listed or exempted.

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : Fire hazard
 Immediate (acute) health hazard
 Delayed (chronic) health hazard

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), light distillate hydrotreating process, low-boiling	No.	No.	No.	Yes.	Yes.
cyclohexane	Yes.	No.	No.	Yes.	Yes.
n-hexane	Yes.	No.	No.	Yes.	Yes.
titanium dioxide	No.	No.	No.	No.	Yes.
crystalite (<10 microns)	No.	No.	No.	No.	Yes.
crystalline silica, respirable powder (<10 microns)	No.	No.	No.	No.	Yes.
crystalline silica, respirable powder (>10 microns)	No.	No.	No.	No.	Yes.

SARA 313

	<u>Chemical name</u>	<u>CAS number</u>	<u>Concentration</u>
Supplier notification	: cyclohexane	110-82-7	3 - 7

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Section 15. Regulatory information

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * Flammability : 4 Physical hazards : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 4 Instability : 0

Date of previous issue : 3/24/2017

Organization that prepared the MSDS : EHS

Key to abbreviations

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

▼ Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

SAFETY DATA SHEET



Date of issue/Date of revision 13 June 2020

Version 14

Section 1. Identification

Product name : LN-903 LIQUID NAILS HEAVY DUTY CONSTRUCTION ADHESIVE INTERIOR/
EXTERIOR AHE90324TN0

Product code : 00407708

Other means of identification : Not available.

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Consumer applications, Professional applications.

**Use of the substance/
mixture** : Adhesive.

Uses advised against : Not applicable.

Manufacturer : PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
SETIQ Interior de la República: 800-00-214-00 (México)
SETIQ Ciudad de México: (55) 5559-1588 (México)

Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : CARCINOGENICITY - Category 1A

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 18.6% (Oral), 69.3% (Dermal), 18.6% (Inhalation)

This product contains TiO₂ which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO₂ is utilized as a raw material in a liquid coating formulation. In this case, the TiO₂ particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO₂ when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8).

GHS label elements

Section 2. Hazards identification

Hazard pictograms



Signal word

: Danger

Hazard statements

: May cause cancer.

Precautionary statements

Prevention

: Obtain special instructions before use. Wear protective gloves. Wear protective clothing. Wear eye or face protection.

Response

: If exposed or concerned: Get medical advice or attention.

Storage

: Store locked up.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

: Contains isothiazolinones. May cause allergic reaction. Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. Emits toxic fumes when heated.

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Product name

: LN-903 LIQUID NAILS HEAVY DUTY CONSTRUCTION ADHESIVE INTERIOR/
EXTERIOR AHE90324TN0

Ingredient name	%	CAS number
Limestone	≥20 - ≤50	1317-65-3
Kaolin	≥5.0 - ≤10	1332-58-7
propane-1,2-diol	≥1.0 - ≤5.0	57-55-6
crystalline silica, respirable powder (>10 microns)	≤1.0	14808-60-7
titanium dioxide	≤1.0	13463-67-7

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon oxides
metal oxide/oxides
Formaldehyde.
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Special precautions** : If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Limestone	OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
Kaolin	TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 3/2019). TWA: 2 mg/m ³ 8 hours. Form: Respirable fraction
propane-1,2-diol	OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
crystalline silica, respirable powder (>10 microns)	TWA: 15 mg/m ³ 8 hours. Form: Total dust IPEL (PPG). TWA: 10 mg/m ³ OSHA PEL Z3 (United States, 6/2016). TWA: 10 mg/m ³ / (%SiO ₂ +2) 8 hours. Form: Respirable TWA: 250 mppcf / (%SiO ₂ +5) 8 hours. Form: Respirable

Section 8. Exposure controls/personal protection

titanium dioxide

OSHA PEL (United States, 5/2018).TWA: 50 µg/m³ 8 hours. Form: Respirable dust**ACGIH TLV (United States, 3/2019).**TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction**OSHA PEL (United States, 5/2018).**TWA: 15 mg/m³ 8 hours. Form: Total dust**ACGIH TLV (United States, 3/2019).**TWA: 10 mg/m³ 8 hours.**Key to abbreviations**

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety glasses with side shields.

Skin protection

Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Tan.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : 8
- Melting point** : Not available.
- Boiling point** : 100°C (212°F)
- Flash point** : Closed cup: Not applicable. [Product does not sustain combustion.]
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Evaporation rate** : 0.05 (butyl acetate = 1)
- Vapor pressure** : 3.3 kPa (25 mm Hg) [room temperature]
- Vapor density** : Not available.
- Relative density** : 1.53
- Density (lbs / gal)** : 12.77
- Solubility** : Partially soluble in the following materials: cold water.
- Partition coefficient: n-octanol/water** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): <0.14 cm²/s (<14 cSt)
- Volatility** : 43% (v/v), 28.41% (w/w)

Section 9. Physical and chemical properties

% Solid. (w/w) : 71.59

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.

Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Limestone	LD50 Oral	Rat	6450 mg/kg	-
Kaolin	LC50 Inhalation Dusts and mists	Rat	>5.07 mg/l	4 hours
	LD50 Oral	Rat	>5000 mg/kg	-
propane-1,2-diol	LD50 Dermal	Rabbit	20800 mg/kg	-
	LD50 Oral	Rat	20 g/kg	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Sensitization

Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

Mutagenicity

Section 11. Toxicological information

Conclusion/Summary : There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Classification

Product/ingredient name	OSHA	IARC	NTP
crystalline silica, respirable powder (>10 microns)	-	1	Known to be a human carcinogen.
titanium dioxide	-	2B	-

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Target organs

Contains material which causes damage to the following organs: eyes.
Contains material which may cause damage to the following organs: lungs, upper respiratory tract, skin, central nervous system (CNS), stomach.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Section 11. Toxicological information

Conclusion/Summary : There are no data available on the mixture itself. Contains isothiazolinones. May cause allergic reaction. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a known cancer hazard, a skin sensitizer and a respiratory sensitizer. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. This product contains TiO₂ which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO₂ is utilized as a raw material in a liquid coating formulation. In this case, the TiO₂ particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO₂ when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Long term exposure

Potential immediate effects : There are no data available on the mixture itself.

Potential delayed effects : There are no data available on the mixture itself.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.


Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity**Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
 Limestone propane-1,2-diol	6450 20000	N/A 20800	N/A N/A	N/A N/A	N/A N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
■ Limestone	Acute LC50 >56000 mg/l	Fish	96 hours
■ propane-1,2-diol	Acute LC50 40613 mg/l	Fish	96 hours
■ titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
■ propane-1,2-diol	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
■ propane-1,2-diol	-0.92	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

Product code 00407708

Date of issue 13 June 2020

Version 14

Product name LN-903 LIQUID NAILS HEAVY DUTY CONSTRUCTION ADHESIVE INTERIOR/
EXTERIOR AHE90324TN0

14. Transport information

	DOT	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class (es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

DOT : None identified.

IMDG : None identified.

IATA : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not applicable.

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are active or exempted.

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification : CARCINOGENICITY - Category 1A

Composition/information on ingredients

Name	%	Classification
crystalline silica, respirable powder (>10 microns)	≤1.0	CARCINOGENICITY - Category 1A
titanium dioxide	≤1.0	CARCINOGENICITY - Category 2

Product code 00407708

Date of issue 13 June 2020

Version 14

Product name LN-903 LIQUID NAILS HEAVY DUTY CONSTRUCTION ADHESIVE INTERIOR/
EXTERIOR AHE90324TN0

Section 15. Regulatory information

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

 **WARNING:** Cancer - www.P65Warnings.ca.gov.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health : 1 * **Flammability** : 0 **Physical hazards** : 0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Health : 1 **Flammability** : 0 **Instability** : 0

Date of previous issue : 8/25/2019

Organization that prepared the MSDS : EHS

Key to abbreviations

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

 Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.



Revision Number: 003.0

Issue date: 10/07/2016

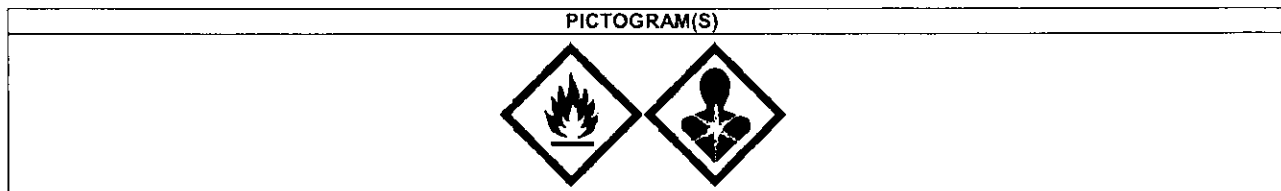
1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE TITEFOAM	IDH number:	1988753
Product type:	Foam, 1-component with propellant gas	Region:	United States
Restriction of Use:	None identified	Contact information:	
Company address:		Telephone: +1 (800) 624-7767	
Henkel Corporation		MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-	
One Henkel Way		4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY	
Rocky Hill, Connecticut 06067		Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887	

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
DANGER:	<p>CONTENTS UNDER PRESSURE. EXTREMELY FLAMMABLE AEROSOL. CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED. CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.</p>

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE AEROSOL	1
SKIN IRRITATION	2
EYE IRRITATION	2A
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	1



Precautionary Statements

Prevention:

Keep away from heat, sparks, open flames, hot surfaces - no smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe mist or spray. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection. In case of inadequate ventilation wear respiratory protection.

Response:

IF ON SKIN: Wash with plenty of water. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. If experiencing respiratory symptoms: Call a poison center or physician. Take off contaminated clothing.

Storage:

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal:

Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

2 % of the mixture consists of ingredient(s) of unknown acute toxicity.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Polyurethane prepolymer	Proprietary	60 - 100
Dimethyl ether	115-10-6	10 - 30
Benzene, 1,1'-methylenebis(isocyanato-, homopolymer	39310-05-9	10 - 30
Isobutane	75-28-5	1 - 5
Methylene bisphenyl isocyanate	26447-40-5	0.1 - 1
Propane	74-98-6	1 - 5
Butane	106-97-8	0.1 - 1

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:

If inhaled, immediately remove the affected person to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.

Skin contact:

Fresh foam : Wipe off affected skin area immediately with a soft cloth and then remove residues with vegetable oil; apply skin care product. Cured foam can be removed only mechanically. Immediately wash skin thoroughly with soap and water. Remove contaminated clothes.

Eye contact:

Flush eyes with plenty of water for at least 5 minutes. If irritation persists seek medical attention.

Ingestion:

Do not induce vomiting, seek medical advice immediately.

Symptoms:

See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media:

powder foam Carbon dioxide. Do not use water.

Special firefighting procedures:

Wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or other positive pressure mode. Wear protective equipment.

Unusual fire or explosion hazards: Cool aerosol containers with jet of water. Containers may explode. Contents under pressure.

Hazardous combustion products: Isocyanate vapors. In the event of a fire, carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x) can be released.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Remove all sources of ignition. Ventilate area. Wear appropriate personal protective equipment.

Clean-up methods: Allow to solidify. Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

Handling: Keep away from heat, spark and flame. Do not puncture or incinerate pressurized containers. Ensure adequate ventilation, especially in confined areas. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep out of the reach of children. When using do not eat, drink or smoke. Wear suitable protective clothing, gloves and eye/face protection. Refer to Section 8.

Storage: Store between 50°F and 80°F. (10° and 27°C) Store away from heat, sparks, flames, or other sources of ignition. Do not store above 49 °C (120 °F). Do not cut or weld container.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Polyurethane prepolymer	None	None	None	None
Dimethyl ether	None	None	1,000 ppm (1,880 mg/m ³) TWA	None
Benzene, 1,1'-methylenebis(isocyanato-, homopolymer	None	None	None	None
Isobutane	1,000 ppm STEL	None	None	None
Methylene bisphenyl isocyanate	None	None	None	None
Propane	Included in the regulation but with no data values. See regulation for further details	1,000 ppm (1,800 mg/m ³) PEL	None	None
Butane	1,000 ppm STEL	None	None	None

Engineering controls: Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent skin eczema or sensitization should be excluded from working with isocyanates. Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.

Eye/face protection: Wear safety glasses with side shields.

Skin protection: Rubber gloves recommended. Suitable protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Aerosol
Color:	white
Odor:	slightly, of ether
Odor threshold:	Not available.
pH:	Not available.
Vapor pressure:	> 100 mm hg (20 °C (68°F))
Boiling point/range:	< -17.7 °C (< 0.1 °F) Compressed Gas.
Melting point/ range:	Not available.
Specific gravity:	1.107
Vapor density:	< 1 (Air = 1)
Flash point:	-104 °C (-155.2 °F)
Flammable/Explosive limits - lower:	0.4 % The product is not explosive. The formation of explosive vapor/air mixtures is possible.
Flammable/Explosive limits - upper:	32 % The product is not explosive. The formation of explosive vapor/air mixtures is possible.
Autoignition temperature:	Not available.
Flammability:	Extremely flammable aerosol.
Evaporation rate:	10 (Butyl acetate = 1)
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	19.28 %; 208.6 g/l (by weight, calculated using CARB method; g/L less water, less exempts calculated using SCAQMD method)
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Not available.
Hazardous reactions:	May occur.
Hazardous decomposition products:	carbon dioxide carbon monoxide nitrogen oxides
Incompatible materials:	Alcohols. Metal compounds. Strong bases. Water.
Reactivity:	Not available.
Conditions to avoid:	Keep away from sources of ignition and naked flames.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:	Inhalation, Ingestion, Skin
------------------------------	-----------------------------

Potential Health Effects/Symptoms

Inhalation: Inhalation of mist or spray may be harmful. As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Chronic overexposure to isocyanates has been reported to cause lung damage. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed (up to several hours after exposure). Persons suffering from allergic reactions to isocyanates should avoid contact with the product. May cause dizziness, incoordination, headache, nausea, and vomiting.

Skin contact: Persons suffering from allergic reactions to isocyanates should avoid contact with the product. Prolonged or repeated skin contact may cause skin irritation or allergic skin sensitization reaction. This product may discolor the skin. Cured material is difficult to remove.

Eye contact: Contact with eyes can cause eye irritation.

Ingestion: Can cause irritation of mucous membranes. Nausea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Polyurethane prepolymer	None	No Records
Dimethyl ether	Inhalation LC50 (Rat, 4 h) = 308.5 mg/l Inhalation LC50 (Rat, 4 h) = 164000 ppm	Irritant, Central nervous system
Benzene, 1,1'-methylenebis(isocyanato-, homopolymer	None	No Target Organs
Isobutane	None	Cardiac, Central nervous system, Lung
Methylene bisphenyl isocyanate	None	Allergen, Irritant, Mutagen, Respiratory
Propane	None	Cardiac, Central nervous system, Irritant
Butane	Inhalation LC50 (Rat, 4 h) = 658 mg/l	Cardiac, Central nervous system, Irritant

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Polyurethane prepolymer	No	No	No
Dimethyl ether	No	No	No
Benzene, 1,1'-methylenebis(isocyanato-, homopolymer	No	No	No
Isobutane	No	No	No
Methylene bisphenyl isocyanate	No	No	No
Propane	No	No	No
Butane	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Aerosols
Hazard class or division: 2.1
Identification number: UN 1950
Packing group: None
DOT Hazardous Substance(s): Methylene diphenyl diisocyanate

International Air Transportation (ICAO/IATA)

Proper shipping name: Aerosols, flammable
Hazard class or division: 2.1
Identification number: UN 1950
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: AEROSOLS
Hazard class or division: 2.1
Identification number: UN 1950
Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire, Sudden Release
CERCLA/SARA Section 313: None above reporting de minimis.

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: This Safety Data Sheet contains changes from the previous version in Section(s): 2,3,8,11

Prepared by: Mary Ellen Roddy, Sr. Regulatory Affairs Specialist

Issue date: 10/07/2016

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SAFETY DATA SHEET

1. Identification

Product number CP844
Product identifier LOGICHEM STAINLESS STEEL CLEANER
Revision date 09-02-2014
Company information LOGICHEM
WOODSIDE, NY 11377 United States
Company phone 1-800-255-3924
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 04
Supersedes date 08-13-2014
Recommended use Cleaner
Recommended restrictions None known.

2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1
Health hazards Aspiration hazard Category 1
Environmental hazards Hazardous to the aquatic environment, acute hazard Category 3
Hazardous to the aquatic environment, long-term hazard Category 3
OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Extremely flammable aerosol. May be fatal if swallowed and enters airways.

Precautionary statement

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting.

Storage

Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

26.36% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 26.36% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	10 - 20
Distillates (Petroleum), Hydrotreated Light		64742-47-8	10 - 20

Product name: WATERBASE STAINLESS STEEL CLNR 844

SOS US

Product #: 1239 Version #: 04 Revision date: 09-02-2014 Issue date: 08-11-2014

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Chemical name	Common name and synonyms	CAS number	%
Propane		74-98-6	2.5 - 10
Polydimethylsiloxane		63148-62-9	1 - 2.5
Other components below reportable levels			60 - 80

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. Aspiration may cause pulmonary edema and pneumonitis.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Take off all contaminated clothing immediately. Wash contaminated clothing before reuse. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.
General fire hazards	Extremely flammable aerosol.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills in original containers for re-use. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Use only outdoors or in a well-ventilated area. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Provide adequate ventilation. Avoid breathing mist or vapor.
Conditions for safe storage, including any incompatibilities	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Keep away from heat, sparks and open flame. Store in a well-ventilated place. Keep in a cool place. Store away from incompatible materials (see Section 10 of the SDS). Level 1 Aerosol.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Propane (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m3 800 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3 1000 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Explosion-proof general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear protective gloves.

Skin protection

Other Wear suitable protective clothing.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Aerosol.

Color Not available.

Odor Not available.

Odor threshold Not available.

pH 5.6 - 6.6 estimated

Melting point/freezing point Not available.

Initial boiling point and boiling range 229.79 °F (109.88 °C) estimated

Flash point -156.0 °F (-104.4 °C) Propellant estimated

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure	47 - 67 psig @ 70F estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	392 °F (200 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Flammability class	Flammable IB estimated
Heat of combustion	6.97 kJ/g estimated
Heat of combustion (NFPA 30B)	10.64 kJ/g estimated
Percent volatile	77.24 % estimated
Specific gravity	0.948 estimated
VOC (Weight %)	15.15 % estimated

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Fluorine. Chlorine. Nitrates.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung edema or pneumonia.
Inhalation	Not available.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics
 Direct contact with eyes may cause temporary irritation. If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death.

Information on toxicological effects

Acute toxicity Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Product	Species	Test Results
WATERBASE STAINLESS STEEL CLNR 844 (CAS Mixture)		
Acute		
<i>Dermal</i>		
LD50	-	30739.2988 mg/kg estimated
	Rabbit	6277.4639 mg/kg, 24 Hours estimated
	Rat	6796 mg/kg
<i>Inhalation</i>		
LC100	Cat	610.998 % estimated
LC50	Mouse	8397.8271 mg/l, 120 Minutes estimated
		353.0211 %, 120 Minutes estimated

Product	Species	Test Results
	Rat	108.6219 mm/l, 2 Hours estimated 88411.4063 ppm, 4 Hours estimated 14.3747 mg/l, 4 Hours estimated

Oral
LD50

Components	Species	Test Results
------------	---------	--------------

Butane (CAS 106-97-8)

Acute

Inhalation

LC50

Mouse

1237 mg/l, 120 Minutes

52 %, 120 Minutes

Rat

1355 mg/l

Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8)

Acute

Dermal

LD50

Rabbit

> 2000 mg/kg

> 2000 mg/kg, 24 Hours

Inhalation

LC50

Rat

> 7.5 mg/l, 6 Hours

> 4.6 mg/l, 4 Hours

Oral

LD50

Rat

> 5000 mg/kg

Propane (CAS 74-98-6)

Acute

Inhalation

LC50

Mouse

1237 mg/l, 120 Minutes

52 %, 120 Minutes

Rat

1355 mg/l

658 mg/l/4h

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

Not available.

Germ cell mutagenicity

Not available.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

May be fatal if swallowed and enters airways.

12. Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Product	Species		Test Results
WATERBASE STAINLESS STEEL CLNR 844 (CAS Mixture)			
Aquatic			
Algae	IC50	Algae	23513 mg/L, 72 Hours
Crustacea	EC50	Daphnia	6441 mg/L, 48 Hours
Fish	LC50	Fish	160 mg/L, 96 Hours
Components	Species		Test Results

Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8)			
Aquatic			
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours

Polydimethylsiloxane (CAS 63148-62-9)			
Aquatic			
Fish	LC50	Channel catfish (Ictalurus punctatus)	2.36 - 4.15 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Butane	2.89
Propane	2.36

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number	UN1950
UN proper shipping name	Aerosols
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Special provisions	153, N82
Packaging exceptions	LTD QTY
Packaging non bulk	None
Packaging bulk	None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA

UN number	UN1950
UN proper shipping name	Aerosols, flammable

Transport hazard class(es)

Class 2.1
 Subsidiary risk -
 Label(s) 2.1

Packing group Not applicable.

Environmental hazards No.
 ERG Code 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed.

Cargo aircraft only Allowed.

Packaging Exceptions LTD QTY

IMDG

UN number UN1950

UN proper shipping name AEROSOLS

Transport hazard class(es)

Class 2.1
 Subsidiary risk -
 Label(s) None

Packing group Not applicable.

Environmental hazards

Marine pollutant No.

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Packaging Exceptions LTD QTY

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

DOT**IATA; IMDG****General information**

IMDG Regulated Marine Pollutant.

15. Regulatory information**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

US. New Jersey Worker and Community Right-to-Know Act

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

US. Rhode Island RTK

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 08-11-2014

Revision date 09-02-2014

Version # 04

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information Physical & Chemical Properties: Multiple Properties

**ELKHORN CHEMICAL
COMPANY, INC.**

208 E Morrissey Drive
Elkhorn, WI 53121

MATERIAL SAFETY DATA SHEET

Revision Date: 5/5/2002

MSDS No.: N-058

Emergency Phones: 800-377-3556

(FAX) 262-723-6382

PLEASE NOTE: This MSDS is being provided to your company for the purpose of providing current health and safety information to your management and for your employees who work with this material. Please read the information on these sheets, and then provide this information to those people at your company whose responsibility it is to comply with FEDERAL and STATE RIGHT-TO-KNOW regulations. Also make this information available to any employee who requests it. It is your obligation to comply with these regulations.

SECTION I - PRODUCT IDENTITY

PRODUCT NAME: Lotionized Hand Cleaner

Formula: Mixture amphoteric and anionic surfactants and emollient additives.

Chemical Type: As above.

HMS RATINGS

Health = 0 (Minimal)	Flammability = 0 (Insignificant)
Reactivity = 0 (Minimal)	Protection = A (Safety Glasses)

SECTION II - HAZARDOUS INGREDIENTS

	PERCENT	TLV	CARCINOGEN (OSHA,TP,ARC)
none			

SECTION III - CHEMICAL AND PHYSICAL

Appearance: Pink emulsion liquid	Boiling Point: 212 ° F.
Odor: Fresh	Melting Point: N/A
pH: 8-9	Spec. Gravity (H ₂ O = 1): 1.03
Water Solubility: Completely	Vapor Pressure (mm Hg): n/a
Viscosity, Cp. @ 25°C C-H Gardner	VOC Content: none (N.A.)

SECTION IV - FIRE AND EXPLOSION HAZARDS

Flash Point (Method): none to boiling.	Explosion Limits: Upper: N/A Lower: N/A
--	--

Extinguishing Media: Water fog, CO₂, halon, foam.

Special Firefighting Procedures and Hazards: In general, no special aspects.

SECTION V - REACTIVITY INFORMATION

Stable: <input checked="" type="checkbox"/>	Unstable: <input type="checkbox"/>
Precautions: Incompatibility: none known.	
Hazardous Decomposition Products: If in a fire, CO, CO ₂ hydrocarbons.	
Hazardous Polymerization: Occurs: <input type="checkbox"/>	Does Not Occur: <input checked="" type="checkbox"/>

SECTION VI - HEALTH HAZARDS - PROTECTIVE MEASURES - FIRST AID

Inhalation: Breathing of mists may cause irritation. If there is a problem, move party to fresh air.

Skin: Extended contact could cause irritation. Some personnel are more sensitive than others, wear gloves if necessary.

Eyes: Can cause irritation. Wear glasses or goggles as needed. If material gets into eyes, flush with water immediately for 15 minutes. If irritation persists, consult a physician.

Ingestion: No effects reported.

Most likely routes of entry: Skin, Eyes

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Spills and Leaks: Spills can be flushed into normal drainage or into the ground with water. An alternate is also to take up with an absorbent material and dispose of in accordance with local regulations.

Storage and Handling: Check daily for any leaks from containers, vessels, pumps, and piping.

Waste Disposal: May be disposable in sewers if local regulations permit. Otherwise, send to licensed treatment and disposal facility.

Empty Containers: n/a

Other Precautions: n/a

SECTION VIII - REGULATORY INFORMATION

Reportable for SARA Title III, S.313 (Form R): none

The information herein has been compiled from sources believed to be reliable and is accurate to the best of our knowledge. However, ELKHORN Chemical cannot give any guarantees regarding information from other sources, and expressly does not make any warranties, nor assumes any liability, for its use.

Safety Data Sheet

Material Name: Low VOC Primer

Product #: 316522-1 gal
319889-1 qt

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

Low VOC Primer

Synonyms

Primer

Chemical Family

Primer, mixture

Product Use

Solvent primer

Restrictions on Use

For industrial use only.

Manufacturer Information

Carlisle SynTec

1285 Ritner Highway

Carlisle, PA 17013 USA

Phone: +1-800-479-6832

Emergency Phone #: +1-800-424-9300 (Chemtreec)

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Flammable Liquids - Category 3

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Eye Irritation - Category 2A

Skin Sensitization - Category 1A

Carcinogenicity - Category 2

Specific Target Organ Toxicity - Single Exposure - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 2 (liver,kidneys)

GHS Label Elements**Symbol(s)****Signal Word**

Warning



Safety Data Sheet

Material Name: Low VOC Primer

Product #: 316522-1 gal
319889-1 qt

Hazard Statement(s)

Flammable liquid and vapor
Causes skin irritation
Causes serious eye irritation
May cause allergic skin reaction
Suspected of causing cancer
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure

Precautionary Statement(s)

Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep container tightly closed
Keep away from heat/sparks/open flame/hot surfaces - No smoking
Ground/Bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting equipment
Take precautionary measures against static discharge
Use only non-sparking tools
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection
Do not breathe dust/fume/gas/mist/vapours/spray
Wash thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace

Response

In case of fire: Use appropriate media to extinguish
IF exposed or concerned: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation or rash occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
Specific treatment (see label)

Storage

Keep container tightly closed
Store in a well-ventilated place. Keep cool
Store locked up

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations

Safety Data Sheet

Material Name: Low VOC Primer

Product #: 316522-1 gal
319889-1 qt

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
64742-89-8	Solvent naphtha, petroleum, light aliphatic	10-30
Trade Secret	Isophorone Diisocyanate	0.5-1.5
108-88-3	Toluene	3-7
Trade Secret	Chlorinated polypropylene	0.1-1
98-56-6	PCBTF	60-100
Trade Secret	Isophorondiamine-isobutyraldimine	0.1-1

Section 4 - FIRST AID MEASURES

Description of Necessary Measures

IF exposed or concerned: Get medical advice/attention.

Inhalation

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

Skin

Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion

If swallowed, get medical attention.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Most Important Symptoms/Effects

Acute

Causes skin irritation. Causes serious eye irritation. May cause allergic skin reaction. May cause drowsiness or dizziness.

Delayed

May cause allergic skin reaction. Suspected of causing cancer. May cause liver and kidney damage.



Safety Data Sheet

Material Name: Low VOC Primer

Product #: 316522-1 gal
319889-1 qt

Note to Physicians

Contains: toluene.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Dry chemical, foam or carbon dioxide. Water may be ineffective.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Special Hazards Arising from the Chemical

Flammable liquid and vapor.

Hazardous Combustion Products

Oxides of carbon, oxides of nitrogen

Advice for firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Fire Fighting Measures

Move container from fire area if it can be done without risk.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up

Remove all sources of ignition. Avoid breathing vapors. Ventilate the area. Use non-sparking tools. Use clean non-sparking tools to collect absorbed material and place it into loosely-covered metal or plastic containers for later disposal. Large spills: Dike for later disposal. Prevent entry into waterways, sewers, basements, or confined areas.

Environmental Precautions

Avoid release to the environment. Collect spillage.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat and ignition sources. When using do not smoke. Use non-sparking tools. Ground any equipment used in handling. Wash with plenty of soap and water. Wash contaminated clothing before reuse. KEEP OUT OF REACH OF CHILDREN. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static



Safety Data Sheet

Material Name: Low VOC Primer

Product #: 316522-1 gal
319889-1 qt

discharge. Do not breathe gas, fumes, vapor, or spray. Contaminated work clothing should not be allowed out of the workplace.

Conditions for Safe Storage, Including any Incompatibilities

Keep container tightly closed

Store in a well-ventilated place. Keep cool

Store locked up

Keep away from heat, sparks and flame. Do not cut, puncture, or weld on or near this container. Empty containers may contain product residue. Keep away from incompatible materials.

Incompatible Materials

Strong oxidizing agents, acids, bases

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Toluene	108-88-3	
ACGIH:	20 ppm TWA	
NIOSH:	100 ppm TWA; 375 mg/m3 TWA	150 ppm STEL; 560 mg/m3 STEL
	500 ppm IDLH	
Europe:	50 ppm TWA; 192 mg/m3 TWA	100 ppm STEL; 384 mg/m3 STEL
	Possibility of significant uptake through the skin	
OSHA (US):	200 ppm TWA	300 ppm Ceiling
Mexico:	50 ppm TWA LMPE-PPT; 188 mg/m3 TWA LMPE-PPT	
	Skin - potential for cutaneous absorption	
PCBTF	98-56-6	
ACGIH:	2.5 mg/m3 TWA as F (related to Fluorides)	
OSHA (US):	2.5 mg/m3 TWA as F; 2.5 mg/m3 TWA dust (related to Fluorides)	
Mexico:	2.5 mg/m3 TWA LMPE-PPT as F (related to Fluorides)	

Biological limit value

There are no biological limit values for any of this product's components.

Engineering Controls

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.



Safety Data Sheet

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Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection

Wear appropriate chemical resistant clothing. Wear protective shoes.

Respiratory Protection

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	thin green liquid	Physical State	liquid
Odor	Naphthenic distillate	Color	green
Odor Threshold	Not available	pH	Not available
Melting Point	-95 - -33 °C(-139 - 27°F)	Boiling Point	111 - 139 °C(232 -282°F)
Freezing point	Not available	Evaporation Rate	1.4
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Autoignition	246 °C(475°F)	Flash Point	4 °C(40°F)
Lower Explosive Limit	0.9	Decomposition	Not available
Upper Explosive Limit	10.5	Vapor Pressure	7.4 mmHg
Vapor Density (air=1)	5.7	Specific Gravity (water=1)	Not available
Water Solubility	insoluble	Partition coefficient: n-octanol/water	Not available
Viscosity	<200 cps	Solubility (Other)	Not available
Density	1.177	VOC	<250 g/L



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Product #: 316522-1 gal
319889-1 qt

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal conditions of use.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Keep away from heat/sparks/open flame/hot surfaces - No smoking. Take action to prevent static discharges. Avoid contact with incompatible materials.

Incompatible Materials

Strong oxidizing agents, acids, bases

Hazardous decomposition products

Oxides of carbon, oxides of nitrogen

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

May cause drowsiness or dizziness.

Skin Contact

Causes skin irritation.

Eye Contact

Causes serious eye irritation.

Ingestion

No information on significant adverse effects.

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Solvent naphtha, petroleum, light aliphatic (64742-89-8)

Oral LD50 Rat >2000 mg/kg

Dermal LD50 Rat >2000 mg/kg

Inhalation Rat >5000 ppm 1 hour

Isophorone Diisocyanate (Trade Secret)

Oral LD50 Rat >20000 mg/kg

Dermal LD50 Rabbit 4000 mg/kg

Inhalation LC50 Rat 5 mg/l 4 h



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Toluene (108-88-3)

- Oral LD50 >7000 mg/kg
- Dermal LD50 12 - 14 g/kg
- Inhalation LC50 30 mg/L

chlorinated homopolymer (Trade Secret)

- Oral Rat 5000 mg/kg

PCBTF (98-56-6)

- Oral LD50 Rat 13 g/kg
- Dermal LD50 Rabbit >2 mL/kg
- Inhalation LC50 Rat 33 mg/L 4 h

Isophorondiamine-isobutyraldimine (Trade Secret)

- Oral Rat 4150 mg/kg [OECD Test Guideline 401]
- Dermal Rat >5000 mg/kg [OECD Test Guideline 402]

Immediate Effects

Causes skin irritation. Causes serious eye irritation. May cause allergic skin reaction. May cause drowsiness or dizziness.

Delayed Effects

May cause allergic skin reaction. Suspected of causing cancer. May cause liver and kidney damage.

Irritation/Corrosivity Data

Causes skin and eye irritation.

Respiratory Sensitization

No information available for the product.

Dermal Sensitization

May cause allergic skin reaction.

Component Carcinogenicity

Toluene	108-88-3
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))
PCBTF	98-56-6
ACGIH:	A4 - Not Classifiable as a Human Carcinogen (related to Fluorides)

Germ Cell Mutagenicity

No information available for the product.

Tumorigenic Data

No data available

Reproductive Toxicity

No information available for the product.



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Specific Target Organ Toxicity - Single Exposure

central nervous system

Specific Target Organ Toxicity - Repeated Exposure

Prolonged exposure may cause liver and kidney damage.

Aspiration hazard

No information available for the product.

Medical Conditions Aggravated by Exposure

May cause allergic skin reaction.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

Solvent naphtha, petroleum, light aliphatic	64742-89-8
Algae:	EC50 72 h Pseudokirchneriella subcapitata 4700 mg/L IUCLID
Isophorone Diisocyanate	Trade Secret
Fish:	LC50 96 h Oncorhynchus mykiss 9.22 mg/L
Invertebrate:	EC50 48 h Daphnia magna 6.14 mg/L IUCLID
Toluene	108-88-3
Fish:	LC50 96 h Pimephales promelas 15.22 - 19.05 mg/L [flow-through] (1 day old); LC50 96 h Pimephales promelas 12.6 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.89 - 7.81 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 14.1 - 17.16 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.8 mg/L [semi-static]; LC50 96 h Lepomis macrochirus 11 - 15 mg/L [static]; LC50 96 h Oryzias latipes 54 mg/L [static]; LC50 96 h Poecilia reticulata 28.2 mg/L [semi-static]; LC50 96 h Poecilia reticulata 50.87 - 70.34 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata >433 mg/L IUCLID; EC50 72 h Pseudokirchneriella subcapitata 12.5 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 5.46 - 9.83 mg/L [static] EPA; EC50 48 h Daphnia magna 11.5 mg/L IUCLID



Safety Data Sheet

Material Name: Low VOC Primer

Product #: 316522-1 gal
319889-1 qt

PCBTF 98-56-6

Invertebrate: EC50 48 h Daphnia magna 3.68 mg/L IUCLID

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

Shipping Name: ADHESIVES

Hazard Class: 3

UN/NA #: UN1133

Packing Group: II

Required Label(s): 3

IATA Information:

Shipping Name: ADHESIVES

Hazard Class: 3

UN#: UN1133

Packing Group: II

Required Label(s): 3

TDG Information:

Shipping Name: ADHESIVES

Hazard Class: 3

UN#: UN1133

Packing Group: II

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Toluene	108-88-3
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SARA 313:	1 % de minimis concentration
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Safety Data Sheet

Material Name: Low VOC Primer

**Product #: 316522-1 gal
319889-1 qt**

CERCLA:	1000 lb final RQ; 454 kg final RQ
TSCA 12b:	Section 4 , 1 % de minimus concentration (related to Hydrocarbons, C>4)
PCBTF	98-56-6
TSCA 12b:	Section 4 , 1 % de minimus concentration

SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: No Reactivity: No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes
PCBTF	98-56-6	Yes	No	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects

Toluene	108-88-3
Repro/Dev. Tox	developmental toxicity , 1/1/1991

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Toluene	108-88-3
	1 %

Component Analysis - Inventory

Solvent naphtha, petroleum, light aliphatic (64742-89-8)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Isophorone Diisocyanate (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes



Safety Data Sheet

Material Name: Low VOC Primer

**Product #: 316522-1 gal
319889-1 qt**

Toluene (108-88-3)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

chlorinated homopolymer (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No

PCBTf (98-56-6)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No

Isophorondiamine-isobutyraldimine (Trade Secret)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	No	No	Yes	Yes	No

Section 16 - OTHER INFORMATION

HMIS Rating

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

NFPA Ratings

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Summary of Changes

New SDS: 4/24/2015

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD -



Safety Data Sheet

Material Name: Low VOC Primer

**Product #: 316522-1 gal
319889-1 qt**

Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

Other Information

Disclaimer:

The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.



SAFETY DATA SHEET

Lubriplate Spray Lube A (Aerosol)

Section 1. Identification

GHS product identifier : Lubriplate Spray Lube A (Aerosol)
Other means of identification : Not available.
Product type : Aerosol.

Relevant identified uses of the substance or mixture and uses advised against

Product use : Petroleum lubricating grease
Area of application : Industrial applications.

Supplier/Manufacturer : LUBRIPLATE® Lubricants Co.
129 Lockwood St.
Newark, NJ 07105
Telephone no.: 1-973-589-9150

e-mail address of person responsible for this SDS : SDS@lubriplate.com

Emergency telephone number (with hours of operation) : CHEM-TEL 1-800-255-3924 (24 hour)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : H222 FLAMMABLE AEROSOLS - Category 1
H280 GASES UNDER PRESSURE - Compressed gas
H315 SKIN IRRITATION - Category 2
H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H304 ASPIRATION HAZARD - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 24.8%

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H222 - Extremely flammable aerosol.
H280 - Contains gas under pressure; may explode if heated.
H315 - Causes skin irritation.
H304 - May be fatal if swallowed and enters airways.
H336 - May cause drowsiness and dizziness.

Date of issue/Date of revision : 06/22/2015 Date of previous issue : No previous validation Version : 1 1/15

Section 2. Hazards identification

Precautionary statements

Prevention	: P280 - Wear protective gloves. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 - Do not spray on an open flame or other ignition source. P271 - Use only outdoors or in a well-ventilated area. P261 - Avoid breathing gas. P264 - Wash hands thoroughly after handling. P251 - Pressurized container: Do not pierce or burn, even after use.
Response	: P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P302 + P352 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. P332 + P313 - If skin irritation occurs: Get medical attention.
Storage	: P405 - Store locked up. P410 - Protect from sunlight. P412 - Do not expose to temperatures exceeding 50 °C/122 °F. P403 - Store in a well-ventilated place.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Avoid contact with skin and clothing. Wash thoroughly after handling.
Hazards not otherwise classified	: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.

CAS number/other identifiers

CAS number	: Not applicable.
Product code	: Not available.

Ingredient name	Other names	%	CAS number
Distillates (petroleum), hydrotreated light	-	≥25 - <50	64742-47-8
Distillates (petroleum), hydrotreated heavy naphthenic	-	≥25 - <50	64742-52-5
Petroleum gases, liquefied, sweetened	-	≥10 - <25	68476-86-8
Distillates (petroleum), hydrotreated light naphthenic	-	≥10 - <25	64742-53-6
zinc oxide	-	≥3 - <5	1314-13-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
- Skin contact** : Causes skin irritation. Defatting to the skin.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Section 4. First aid measures

- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Do not use water jet.
- Specific hazards arising from the chemical** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Do not store above the following temperature: 49°C (120.2°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated light	ACGIH TLV (United States, 4/2014). Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hours.
Distillates (petroleum), hydrotreated heavy naphthenic	ACGIH TLV (United States, 4/2014). TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2013). TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours.
Petroleum gases, liquefied, sweetened	ACGIH TLV (United States, 1/2008). TWA: 1000 ppm 8 hours.
Distillates (petroleum), hydrotreated light naphthenic	ACGIH TLV (United States, 4/2014). TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2013). TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours.
zinc oxide	NIOSH REL (United States, 10/2013). CEIL: 15 mg/m ³ Form: Dust TWA: 5 mg/m ³ 10 hours. Form: Dust and fumes STEL: 10 mg/m ³ 15 minutes. Form: Fume OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m ³ 8 hours. Form: Fume STEL: 10 mg/m ³ 15 minutes. Form: Fume TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 10 mg/m ³ 8 hours. Form: Total dust OSHA PEL (United States, 2/2013). TWA: 5 mg/m ³ 8 hours. Form: Fume TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust ACGIH TLV (United States, 4/2014). TWA: 2 mg/m ³ 8 hours. Form: Respirable fraction STEL: 10 mg/m ³ 15 minutes. Form: Respirable fraction

Section 8. Exposure controls/personal protection

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Gas. [Aerosol.]

Color : Clear/White.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

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Section 9. Physical and chemical properties

Boiling point	: Not available.
Flash point	: Closed cup: -17°C (1.4°F)
Evaporation rate	: <1 (ether (anhydrous) = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: >1 [Air = 1]
Relative density	: <1
Solubility	: Not available.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Not available.
Type of aerosol	: Spray

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame).
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), hydrotreated light naphthenic	LD50 Oral	Rat	>5000 mg/kg	-

Section 11. Toxicological information

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Distillates (petroleum), hydrotreated heavy naphthenic zinc oxide	Skin - Severe irritant	Rabbit	-	500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Distillates (petroleum), hydrotreated light	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated heavy naphthenic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light naphthenic	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.

Skin contact : Causes skin irritation. Defatting to the skin.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light zinc oxide	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days
	Acute IC50 1.85 mg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute IC50 46 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 98 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Petroleum gases, liquefied, sweetened	1.09	-	low
zinc oxide	-	60960	high

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.


Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN1950	UN1950	UN1950
UN proper shipping name	Aerosols (Limited quantity)	AEROSOLS (Limited quantity)	Aerosols, flammable (Limited quantity)
Transport hazard class(es)	2.1 This product meets the Limited Quantity exemption.	2.1 This product meets the Limited Quantity exemption.	2.1 This product meets the Limited Quantity exemption. 
Packing group	-	-	-
Environmental hazards	No.	Yes.	No.
Additional information	<p><u>Packaging instruction</u> Passenger aircraft Quantity limitation: 75 kg</p> <p>Cargo aircraft Quantity limitation: 150 kg</p> <p><u>Special provisions</u> N82</p> <p><u>Remarks</u> Packaging: Limited quantity</p>	<p>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</p> <p><u>Emergency schedules (EmS)</u> F-D, S-U</p> <p><u>Special provisions</u> 63, 190, 277, 327, 959, 344</p> <p><u>Remarks</u> Packaging: Limited quantity</p>	<p>The environmentally hazardous substance mark may appear if required by other transportation regulations.</p> <p><u>Passenger and Cargo Aircraft</u> Quantity limitation: 75 kg Packaging instructions: 203</p> <p><u>Cargo Aircraft Only</u>Quantity limitation: 150 kg Packaging instructions: 203</p> <p><u>Limited Quantities - Passenger Aircraft</u>Quantity limitation: 30 kg Packaging instructions: Y203</p> <p><u>Special provisions</u> A145, A167, A802</p> <p><u>Remarks</u> Packaging: Limited quantity</p>

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.
Clean Water Act (CWA) 307: zinc oxide

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
 Sudden release of pressure
 Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), hydrotreated light	≥25 - <50	Yes.	No.	No.	Yes.	No.
Distillates (petroleum), hydrotreated heavy naphthenic	≥25 - <50	No.	No.	No.	Yes.	No.
Petroleum gases, liquefied, sweetened	≥10 - <25	Yes.	Yes.	No.	Yes.	No.
Distillates (petroleum), hydrotreated light naphthenic	≥10 - <25	No.	No.	No.	Yes.	No.
zinc oxide	≥3 - <5	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	zinc oxide	1314-13-2	≥3 - <5
Supplier notification	zinc oxide	1314-13-2	≥3 - <5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC; ZINC OXIDE FUME

New York : None of the components are listed.

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Section 15. Regulatory information

New Jersey : The following components are listed: MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL; MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL; ZINC OXIDE

Pennsylvania : The following components are listed: ZINC OXIDE (ZNO)

California Prop. 65

None of the components are listed.

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

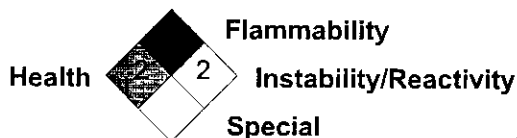
Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		4
Physical hazards		2

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Flam. Aerosol 1, H222 Press. Gas Comp. Gas, H280 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304	On basis of test data On basis of test data Calculation method Calculation method Expert judgment

History

Date of issue/Date of revision	: 06/22/2015
Date of previous issue	: No previous validation
Version	: 1
Prepared by	: IHS
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
References	: HCS (U.S.A.)- Hazard Communication Standard International transport regulations

☒ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



SAFETY DATA SHEET

Lucas Red "N" Tacky NLGI # 2 grease

Section 1. Identification

GHS product identifier : Lucas Red "N" Tacky NLGI # 2 grease
Other means of identification : Not available.
Product number : 10005, 10027, 10028, 10029, 10574

Relevant identified uses of the substance or mixture and uses advised against
Engine oil.

Supplier's details : Lucas Oil Products, Inc
302 North Sheridan Street
Corona, California 92880-2067
Toll Free: (800) 342-2512
Tel: (951) 270-0154
Fax: (951) 270-1902
Website: www.LucasOil.com

Emergency telephone number (with hours of operation) : (951) 493-1149
(951) 847-5949
Markn@lucasoil.com
7:00A.M. to 5:00P.M. Monday thru Friday

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 3

GHS label elements

Hazard pictograms :



Signal word : Danger
Hazard statements : Causes serious eye damage.
Harmful to aquatic life with long lasting effects.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention : Wear eye or face protection. Avoid release to the environment. Wash hands thoroughly after handling.



Section 2. Hazards identification

Response	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	: Not applicable.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.

CAS number/other identifiers

CAS number	: Not applicable.
Product code	: Not available.

Ingredient name	%	CAS number
ZincAlkyldithiophosphate	1 - 5	68649-42-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.



Section 4. First aid measures

- Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact : Causes serious eye damage.
 Inhalation : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
 Skin contact : No known significant effects or critical hazards.
 Ingestion : May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact : No known significant effects or critical hazards.
 Inhalation : No known significant effects or critical hazards.
 Skin contact : No known significant effects or critical hazards.
 Ingestion : No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
 Specific treatments : No specific treatment.
 Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.
 Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

- Hazardous thermal decomposition products : No specific data.

Section 5. Fire-fighting measures

- Special protective actions for fire-fighters : No special precaution is required.
- Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

- Small spill : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

- Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

- Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state : Solid. [Grease.]
- Color : Red.
- Odor : Mild. Petroleum oil.
- Odor threshold : Not available.
- pH : Not applicable.
- Melting point : Not available.
- Boiling point : Not available.



Section 9. Physical and chemical properties

Flash point	: Not available.
Burning time	: Not available.
Burning rate	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.9
Solubility	: Negligible at 25°C
Solubility in water	: 0 g/l
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Kinematic (100°C (212°F)): 0.19 cm ² /s (19 cSt)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Excessive heat.
Incompatible materials	: Reactive or incompatible with the following materials: strong oxidizers.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Zinc Alkyl dithiophosphate	Eyes - Irritant	Rabbit	-	-	-

Sensitization

Skin	: There is no data available.
Respiratory	: There is no data available.



Section 11. Toxicological information

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available. Specific target organ toxicity (single exposure) There is no data available. Specific target organ toxicity (repeated exposure) There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : Causes serious eye damage.
 Inhalation : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
 Skin contact : No known significant effects or critical hazards.
 Ingestion : May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.
 Inhalation : No known significant effects or critical hazards.
 Skin contact : No known significant effects or critical hazards.
 Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.
 Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.
 Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.



Section 11. Toxicological information

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Zinc Alkyldithiophosphate	Acute EC50 1 to 5 mg/L Acute EC50 1 to 1.5 mg/L Chronic LC50 1 to 5 mg/L	Algae Crustaceans Fish	96 hours 48 hours 96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.



Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) PAIR: Zinc Alkyldithiophosphate
 TSCA 8(a) CDR Exempt/Partial exemption: Not determined
 United States inventory (TSCA 8b): All components are listed or exempted.
 Clean Water Act (CWA) 307: Zinc Alkyldithiophosphate

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.



Section 15. Regulatory information

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Zinc Alkyldithiophosphate	1 - 5	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Zinc Alkyldithiophosphate	68649-42-3	1 - 5
Supplier notification	Zinc Alkyldithiophosphate	68649-42-3	1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : None of the components are listed.
 New York : None of the components are listed.
 New Jersey : The following components are listed: Distillates (petroleum), hydrotreated heavy naphthenic; Distillates (petroleum), solvent-dewaxed heavy paraffinic; Zinc Alkyldithiophosphate
 Pennsylvania : The following components are listed: Zinc Alkyldithiophosphate

California Prop. 65

No products were found.

International regulations

International lists : Australia inventory (AICS): All components are listed or exempted.
 China inventory (IECSC): All components are listed or exempted.
 Japan inventory: Not determined.
 Korea inventory: All components are listed or exempted.
 Malaysia Inventory (EHS Register): Not determined.
 New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
 Philippines inventory (PICCS): All components are listed or exempted.
 Taiwan inventory (CSNN): Not determined.

Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed



Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health : 2 * Flammability : 0 Physical hazards : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 0 Instability : 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue mm/dd/yyyy : 02/15/2014
 Version : 1
 Revised Section(s) : Not applicable.
 Prepared by : KMK Regulatory Services Inc.
 Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



SAFETY DATA SHEET

Lysol Advanced Deep Clean All Purpose Cleaner - Lemon Breeze Scent



HEALTH • HYGIENE • HOME

1. Product and company identification

Product name : Lysol Advanced Deep Clean All Purpose Cleaner - Lemon Breeze Scent

Distributed by : Reckitt Benckiser LLC.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
+1 973 404 2600

Emergency telephone number (Medical) : 1-800-338-6167

Emergency telephone number (Transport) : 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

Website: : <http://www.rbnainfo.com>

Product use : Kitchen Cleaner.

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS # : D0161394 v7.0

Formulation #: : 1489-111 (0160711 v1.0)

EPA ID No. : 777-91

UPC Code / Sizes : HDPE Bottle

D0161394 v7.0

2. Hazards identification

Classification of the substance or mixture : EYE IRRITATION - Category 2B
SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes eye irritation.
May cause an allergic skin reaction.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear protective gloves. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response : IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : None known.

Hazards not otherwise classified : None known.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	< 0.1	68424-85-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

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4. First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : No specific data.

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits

Ingredient name	Exposure limits
2-aminoethanol	<p>ACGIH TLV (United States, 4/2014). TWA: 3 ppm 8 hours. TWA: 7.5 mg/m³ 8 hours. STEL: 6 ppm 15 minutes. STEL: 15 mg/m³ 15 minutes.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 3 ppm 8 hours. TWA: 8 mg/m³ 8 hours. STEL: 6 ppm 15 minutes. STEL: 15 mg/m³ 15 minutes.</p> <p>NIOSH REL (United States, 10/2013). TWA: 3 ppm 10 hours. TWA: 8 mg/m³ 10 hours. STEL: 6 ppm 15 minutes. STEL: 15 mg/m³ 15 minutes.</p> <p>OSHA PEL (United States, 2/2013). TWA: 3 ppm 8 hours. TWA: 6 mg/m³ 8 hours.</p>

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Clear.
- Odor** : Citrus
- Odor threshold** : Not available.
- pH** : 10.5 to 11.5 [Conc. (% w/w): 100%]
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Closed cup: >93.3°C (>199.9°F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : Not available.
- Solubility** : Easily soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.
- Flow time (ISO 2431)** : Not available.

Code # : FF0160711
(D0161394) US

SDS # : D0161394 v7.0

Date of issue : 13/11/2017

6/14

D0161394 v7.0

10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Keep away from extreme heat. Keep from freezing. Protect from moisture.
Incompatible materials	: Do not mix with household chemicals.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides Lysol Brand II Kills 99.9% of Viruses & Bacteria** Power Kitchen Cleaner Grease & Sparkle_FF0160711 (D0161394) US	LD50 Dermal	Rabbit	2848 mg/kg	-
	LD50 Dermal	Rabbit	3413 mg/kg	-
	LD50 Oral	Rat	344 mg/kg	-
	LD50 Oral	Rat	398 mg/kg	-
	LC50 Inhalation Vapor	Rat	>2.23 mg/l	4 hours
	LD50 Dermal	Rabbit	>5050 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary : Not classified * Information is based on toxicity test result of a similar product.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-aminoethanol	Eyes - Severe irritant	Rabbit	-	250 Micrograms	-
	Skin - Moderate irritant	Rabbit	-	505 milligrams	-
dodecyldimethylamine oxide	Eyes - Severe irritant	Rabbit	-	1 Percent	-
	Skin - Mild irritant	Human	-	48 hours 3.7 Percent	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides *Lysol Brand II Kills 99.9% of Viruses & Bacteria** Power Kitchen Cleaner Grease & Sparkle	Skin - Severe irritant	Rabbit	-	25 milligrams	-
	Eyes - Cornea opacity	Rabbit	>1	-	-
	Skin - Edema	Rabbit	0	-	-

Conclusion/Summary

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11. Toxicological information

Skin : Non-irritant to skin. * Information is based on toxicity test result of a similar product.

Eyes : Severely irritating to eyes. * Information is based on toxicity test result of a similar product.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	skin	Guinea pig	Not sensitizing
Lysol Brand II Kills 99.9% of Viruses & Bacteria** Power Kitchen Cleaner Grease & Sparkle_FF0160711 (D0161394) US	skin	Guinea pig	Sensitizing

Conclusion/Summary

Skin : Skin sensitizer *Information is based on toxicity test result of a similar product.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	OECD 471 - Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD 473 - Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 476 - Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes eye irritation.

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11. Toxicological information

- Inhalation** : No known significant effects or critical hazards.
Skin contact : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
 irritation
 watering
 redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
Potential delayed effects : Not available.

Long term exposure

- Potential immediate effects** : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

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12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	Acute EC50 0.016 mg/l	Daphnia	48 hours
	Acute LC50 64 ppb Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	-	-	Readily

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not Regulated	Not applicable.	Not available.	-		-

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14. Transport information

TDG Classification	Not Regulated	Not applicable.	Not available.	-		-
Mexico Classification	Not Regulated	Not applicable.	Not available.	-		-
IMDG Class	Not Regulated	Not applicable.	Not available.	-		-
IATA-DGR Class	Not Regulated	Not applicable.	Not available.	-		-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

PG* : Packing group

15. Regulatory information

U.S. Federal regulations : **TSCA 4(a) proposed test rules:** Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides; Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides
TSCA 8(a) PAIR: 1-phenoxypropan-2-ol; 2-methylundecanal; 3-p-cumenyl-2-methylpropionaldehyde
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): Not determined.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

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15. Regulatory information

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	< 0.1	No.	No.	No.	Yes.	No.

State regulations

Massachusetts : None of the components are listed.
New York : None of the components are listed.
New Jersey : None of the components are listed.
Pennsylvania : None of the components are listed.

Canada

WHMIS (Canada) : Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

Canadian NPRI : None of the components are listed.
CEPA Toxic substances : None of the components are listed.
Canada inventory : Not determined.

Label elements

Signal word: : WARNING

Hazard statements : Causes substantial but temporary eye injury

Precautionary measures : Keep out of reach of children.
Do not get in eyes, on skin or on clothing.
Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Skin sensitizer: : Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals

16. Other information

Hazardous Material Information System (U.S.A.) :

Health	2
Flammability	0
Physical hazards	0
Personal protection	B

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

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16. Other information

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

Date of issue : 13/11/2017

Date of previous issue : 25/10/2016.

Version : 7

Prepared by : Reckitt Benckiser LLC.
Consumer Safety Department
1 Philips Parkway
Montvale, New Jersey 07646-1810 USA.
FAX: 201-476-7770

Revision comments : Update of the SDS.

☑ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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16. Other information



RB is a member of the CSPA Product Care Product Stewardship Program.

SAFETY DATA SHEET



LYSOL® All Purpose Cleaner - Power White & Shine Trigger with Bleach

HEALTH · HYGIENE · HOME

1. Product and company identification

Product name : LYSOL® All Purpose Cleaner - Power White & Shine Trigger with Bleach

Distributed by : Reckitt Benckiser LLC.
 Morris Corporate Center IV
 399 Interpace Parkway (P.O. Box 225)
 Parsippany, New Jersey 07054-0225
 +1 973 404 2600

Emergency telephone number (Medical) : 1-800-338-6167

Emergency telephone number (Transport) : 1-800-424-9300 (U.S. & Canada) CHEMTREC
 Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

Website: : <http://www.rbnainfo.com>

Product use : Multipurpose Cleaner

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS # : D0004478 v5.0

Formulation #: : 292-017A (0003419 v4.0)

EPA ID No. : 777-83

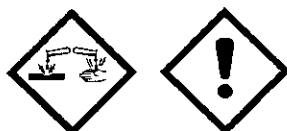
UPC Code / Sizes : 19200-78914-30 (32 oz. Trigger HDPE Bottle)

2. Hazards identification

Classification of the substance or mixture : CORROSIVE TO METALS - Category 1
 SKIN CORROSION/IRRITATION - Category 2
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B
 SKIN SENSITIZATION - Category 1
 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 2.5%

GHS label elements

Hazard pictograms :



Signal word : Warning

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2. Hazards identification

Hazard statements : May be corrosive to metals.
Causes skin and eye irritation.
May cause an allergic skin reaction.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear protective gloves. Wear eye or face protection. Keep only in original container. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response : Absorb spillage to prevent material damage. **IF ON SKIN:** Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store in corrosive resistant container with a resistant inner liner.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : None known.

Hazards not otherwise classified : None known.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
sodium hypochlorite, solution	1 - 2.5	7681-52-9
sodium hydroxide	< 0.25	1310-73-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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4. First aid measures

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : Causes skin irritation. May cause an allergic skin reaction.
Ingestion : Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
 pain or irritation
 watering
 redness
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
 irritation
 redness
Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

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5. Fire-fighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
halogenated compounds
metal oxide/oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

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7. Handling and storage

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in corrosive resistant container with a resistant inner liner. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits

Ingredient name	Exposure limits
sodium hypochlorite, solution	AIHA WEEL (United States, 10/2011). STEL: 2 mg/m ³ 15 minutes.
sodium hydroxide	ACGIH TLV (United States, 6/2013). C: 2 mg/m ³ OSHA PEL 1989 (United States, 3/1989). CEIL: 2 mg/m ³ NIOSH REL (United States, 10/2013). CEIL: 2 mg/m ³ OSHA PEL (United States, 2/2013). TWA: 2 mg/m ³ 8 hours.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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8. Exposure controls/personal protection

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. Physical and chemical properties

Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Straw. [Light]
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : 12.3 to 12.7 [Conc. (% w/w): 100%][25°C]
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Closed cup: >93.3°C (>199.9°F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 1.042 to 1.048@ 20°C
- Solubility** : Easily soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.

10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : Reactive or incompatible with the following materials:
acids
Do not mix with household chemicals.
May be corrosive to metals.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
*LYSOL® All Purpose Cleaner - Power White & Shine Trigger with Bleach	LC50 Inhalation Vapor	Rat	200 mg/l	4 hours
	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary : Not classified Harmful. * Information is based on toxicity test result of a similar product.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
sodium hydroxide	Eyes - Severe irritant	Monkey	-	24 hours 1 Percent	-
	Eyes - Mild irritant	Rabbit	-	400 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 50 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	1 Percent	-
	Eyes - Severe irritant	Rabbit	-	0.5 minutes 1 milligrams	-
	Skin - Mild irritant	Human	-	24 hours 2 Percent	-
	Skin - Severe irritant	Rabbit	-	24 hours 500 milligrams	-
sodium hypochlorite, solution	Eyes - Mild irritant	Rabbit	-	1.31 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
*LYSOL® All Purpose Cleaner - Power White & Shine Trigger with Bleach	Eyes - Iris lesion	Rat	>1	-	-
	Skin - Erythema/Eschar	Rat	5.25	-	-

Conclusion/Summary

Skin : Severely irritating to the skin. *Information is based on toxicity test result of a similar product.

Eyes : Moderately irritating to eyes. *Information is based on toxicity test result of a similar product.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
*LYSOL® All Purpose Cleaner - Power White & Shine Trigger with Bleach	skin	Guinea pig	Sensitizing

Conclusion/Summary

Skin : Skin sensitizer * Information is based on toxicity test result of a similar product.

Mutagenicity

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11. Toxicological information

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
sodium hypochlorite, solution	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

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11. Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
sodium hypochlorite, solution	Acute EC50 46000 µg/l Marine water	Algae - Gracilaria tenuistipitata	4 days
	Acute LC50 56400 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 32 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 32 µg/l Marine water	Fish - Oncorhynchus kisutch - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 10000 µg/l Marine water	Algae - Gracilaria tenuistipitata	4 days
	Chronic NOEC 0.1 ppm Fresh water	Fish - Cyprinus carpio - Young	30 days

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : Release of large quantities into water may cause a pH-change resulting in danger for aquatic life.

D0004478 v5.0

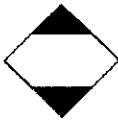
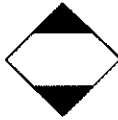
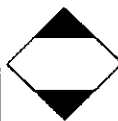
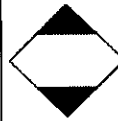

12. Ecological information

Release of large quantities into water may cause a pH-change resulting in danger for aquatic life.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN3266	Corrosive liquid, basic, inorganic, n.o.s. (Sodium hypochlorite , sodium hydroxide)	8	II		<u>Limited quantity</u>
TDG Classification	UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hypochlorite, solution, sodium hydroxide)	8	II		<u>Limited quantity</u>
Mexico Classification	UN3266	LIQUIDO CORROSIVO, BASICO, INORGANICO, N.E.P. (sodium hypochlorite, solution, sodium hydroxide)	8	II		<u>Limited quantity</u>
IMDG Class	UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hypochlorite , sodium hydroxide).	8	II		<u>Limited quantity</u>
IATA-DGR Class	UN3266	Corrosive liquid, basic, inorganic, n.o.s. (sodium hypochlorite, solution, sodium hydroxide)	8	II		<u>See DG List.</u>

PG* : Packing group

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15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined
 United States inventory (TSCA 8b): Not determined.
 Clean Water Act (CWA) 311: sodium hypochlorite, solution; sodium hydroxide

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Reactive
 Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
sodium hypochlorite, solution	1 - 2.5	No.	No.	No.	Yes.	No.

State regulations

Massachusetts : The following components are listed: SODIUM HYPOCHLORITE
New York : The following components are listed: Sodium hypochlorite
New Jersey : The following components are listed: SODIUM HYPOCHLORITE; HYPOCHLOROUS ACID, SODIUM SALT
Pennsylvania : The following components are listed: HYPOCHLOROUS ACID, SODIUM SALT

Label elements

Signal word: : WARNING
Hazard statements : Causes moderate eye irritation
 Causes skin irritation.
Precautionary measures : Do not get in eyes, on skin, or on clothing.

D0004478 v5.0

15. Regulatory information

Vapor may be irritating to eyes and respiratory system. Use only in a well-ventilated area. Avoid breathing vapor or spray. Not recommended for use by persons with heart conditions or chronic respiratory problems such as asthma, emphysema or obstructive lung disease. Harmful if swallowed. For sensitive skin, the use of gloves is recommended. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Skin sensitizer: : Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals

Additional information : Short term Skin Bleaching agent. IF ON SKIN: Rinse skin with water.

16. Other information

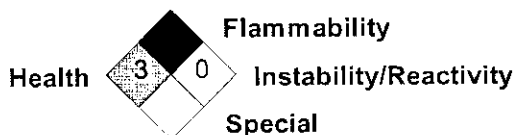
Hazardous Material Information System (U.S.A.) :

Health	3
Flammability	0
Instability/Reactivity	0
Personal protection	D

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

D0004478 v5.0

16. Other information

Date of issue : 31/03/2015.
Date of previous issue : 15/06/2006.
Version : 5
Prepared by : Reckitt Benckiser LLC.
Product Safety Department
1 Philips Parkway
Montvale, New Jersey 07646-1810 USA.
FAX: 201-476-7770

Revision comments : Update as per US GHS.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



RB is a member of the CSPA Product Care Product Stewardship Program.

SAFETY DATA SHEET

LYSOL® All Purpose Cleaner - Brand New Day™ - Mango & Hibiscus



HEALTH • HYGIENE • HOME

1. Product and company identification

Product name : LYSOL® All Purpose Cleaner - Brand New Day™ - Mango & Hibiscus**Distributed by** : Reckitt Benckiser LLC.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
+1 973 404 2600Reckitt Benckiser (Canada) Inc.
1680 Tech Avenue, Unit #2
Mississauga, Ontario L4W 5S9
CANADA
Telephone: +1 905 283 7000**Emergency telephone number (Medical)** : 1-800-338-6167**Emergency telephone number (Transport)** : 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887**Website:** : <http://www.rbnainfo.com>**Product use** : Multipurpose Cleaner

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS # : D8320404 v5.0**Formulation #** : Bvegan Trigger: 8316520 v.1.0
BB2-Tropic: 8316780 v3.0
WBCC2-Cucumber: 8316782 v.1.0**EPA ID No.** : 777-66**DIN #** : 02246307

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Consumer use

D8320404 v5.0

2. Hazards identification

Classification of the substance or mixture : EYE IRRITATION - Category 2B
SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : May cause an allergic skin reaction.
Causes eye irritation.

Precautionary statements

General : Keep out of reach of children.
If medical advice is needed, have product container or label at hand.

Prevention : Wear protective gloves. Avoid breathing vapor. Wash thoroughly after handling.

Response : Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : None known.

Hazards not otherwise classified : None known.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides	< 0.1	63449-41-2
quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	< 0.1	68424-85-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

D8320404 v5.0

4. First aid measures

See toxicological information (Section 11)

5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : No specific data.
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

D8320404 v5.0

7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Control

Occupational exposure limits

Not applicable.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

- Hand protection** : Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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8. Exposure controls/personal protection

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

9. Physical and chemical properties

Appearance

Physical state : Liquid. [Clear.]

Color : Not available.

Odor : Bvegan
Tropic
Cucumber

Odor threshold : Not available.

pH : 10.3 to 11.3 [Conc. (% w/w): 100%]

Melting point : Not available.

Boiling point : Not available.

Flash point : Closed cup: >93.3°C (>199.9°F)

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 0.98 to 1.01

Density : 0.98 to 1.01 g/cm³ [25°C (77°F)]

Solubility : Easily soluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

Aerosol product

10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

D8320404 v5.0

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides Lysol® Brand Kills 99.9% of Viruses and Bacteria**All Purpose Cleaner Trigger_Biocide_D8320404 (NA)	LD50 Dermal	Rat	1420 mg/kg	-
	LD50 Dermal	Rabbit	2848 mg/kg	-
	LD50 Dermal	Rabbit	3413 mg/kg	-
	LD50 Oral	Rat	344 mg/kg	-
	LD50 Oral	Rat	398 mg/kg	-
	LD50 Inhalation Vapor	Rat	>2.23 mg/l Maximum attainable concentration	4 hours
	LD50 Dermal	Rabbit	>5050 mg/kg	-
LD50 Oral	Rat	>5000 mg/kg	-	

Conclusion/Summary : Not classified. Harmful *Information is based on toxicity test result of a similar product.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides Lysol® Brand Kills 99.9% of Viruses and Bacteria**All Purpose Cleaner Trigger_Biocide_D8320404 (NA)	Skin - Severe irritant	Rabbit	-	25 milligrams	-
	Eyes - Cornea opacity	Rabbit	>1	-	72 hours
	Skin - Edema	Rabbit	0	-	-

Conclusion/Summary

Skin : Non-irritant to skin. *Information is based on toxicity test result of a similar product.

Eyes : Severely irritating to eyes. *Information is based on toxicity test result of a similar product.

Respiratory : Based on available data, the classification criteria are not met.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides Lysol® Brand Kills 99.9% of Viruses and Bacteria**All Purpose Cleaner Trigger_Biocide_D8320404 (NA)	skin	Guinea pig	Not sensitizing
	skin	Mouse	Sensitizing

D8320404 v5.0

11. Toxicological information

Conclusion/Summary

- Skin** : Skin sensitizer *Information is based on toxicity test result of a similar product.
Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	OECD 471 - Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD 473 - Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 476 - Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Carcinogenicity

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Reproductive toxicity

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Teratogenicity

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

- Information on the likely routes of exposure** : Not available.

Potential acute health effects

- Eye contact** : Causes eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

D8320404 v5.0

11. Toxicological information

- Eye contact** : Adverse symptoms may include the following:
irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.
- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides	N/A	1420	N/A	N/A	N/A
quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	344	2848	N/A	N/A	N/A

D8320404 v5.0

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	Acute LC50 310 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute EC50 0.016 mg/l	Daphnia	48 hours
	Acute LC50 64 ppb Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic EC10 0.009 mg/l	Algae	72 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	-	-	Readily

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

D8320404 v5.0

14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Additional information

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

15. Regulatory information

U.S. Federal regulations :

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304**Composition/information on ingredients**

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : EYE IRRITATION - Category 2B
SKIN SENSITIZATION - Category 1

Composition/information on ingredients

D8320404 v5.0

15. Regulatory information

Name	%	Classification
quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides	<0.1	COMBUSTIBLE DUSTS ACUTE TOXICITY (dermal) - Category 4
quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	<0.1	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

State regulations

- Massachusetts** : None of the components are listed.
New York : None of the components are listed.
New Jersey : None of the components are listed.
Pennsylvania : None of the components are listed.
California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

Label elements

CCCR

- Signal word** : CAUTION
Hazard statements : MAY IRRITATE EYES.
- Precautionary measures** : KEEP OUT OF REACH OF CHILDREN.
 DO NOT get in eyes.
 Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

EPA

- Signal word:** : CAUTION
Hazard statements : EYE IRRITANT.

- Special Inert substance.** :
Precautionary measures :
 KEEP OUT OF REACH OF CHILDREN.
 DO NOT get in eyes.

- Skin sensitizer** : Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals

Additional information / Recommendations

- Additional information** : **For US & Canada:**
 Contains Amines, C12-14 (even numbered)-alkyldimethyl, N-oxides and Monoethanolamine.

D8320404 v5.0

16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	2
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



NFPA (30B) aerosol Flammability Not applicable

Key to abbreviations

: ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

Date of issue : 12/8/2020
Date of previous issue : 07/27/2020
Version : 5
Prepared by : Reckitt Benckiser India Ltd
 Plot No 48
 Sector - 32
 Institutional Area
 Gurgaon, Haryana
 India - 122001

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

D8320404 v5.0

16. Other information



RB is a member of the CSPA Product Care Product Stewardship Program.

SAFETY DATA SHEET

Lysol Antibacterial Kitchen Cleaner - Complete Clean - Citrus Scent



HEALTH • HYGIENE • HOME

1. Product and company identification

Product name : Lysol Antibacterial Kitchen Cleaner - Complete Clean - Citrus Scent

Distributed by : Reckitt Benckiser LLC.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
+1 973 404 2600

Emergency telephone number (Medical) : 1-800-338-6167

Emergency telephone number (Transport) : 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

Website: : <http://www.rbnainfo.com>

Product use : Kitchen Cleaner.

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS # : D0161394 v6.0

Formulation #: : 1489-111 (0160711 v1.0)

EPA ID No. : 777-91

UPC Code / Sizes : 22 FL OZ and 28 FL OZ

D0161394 v6.0

2. Hazards identification

Classification of the substance or mixture : EYE IRRITATION - Category 2B
SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes eye irritation.
May cause an allergic skin reaction.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear protective gloves. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response : IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : None known.

Hazards not otherwise classified : None known.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	< 0.25	68424-85-1
dodecyldimethylamine oxide	0.1 - 1	1643-20-5
2-aminoethanol	0.1 - 1	141-43-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

4. First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

D0161394 v6.0

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : No specific data.

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

D0161394 v6.0

7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits

Ingredient name	Exposure limits
2-aminoethanol	<p>ACGIH TLV (United States, 4/2014). TWA: 3 ppm 8 hours. TWA: 7.5 mg/m³ 8 hours. STEL: 6 ppm 15 minutes. STEL: 15 mg/m³ 15 minutes.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 3 ppm 8 hours. TWA: 8 mg/m³ 8 hours. STEL: 6 ppm 15 minutes. STEL: 15 mg/m³ 15 minutes.</p> <p>NIOSH REL (United States, 10/2013). TWA: 3 ppm 10 hours. TWA: 8 mg/m³ 10 hours. STEL: 6 ppm 15 minutes. STEL: 15 mg/m³ 15 minutes.</p> <p>OSHA PEL (United States, 2/2013). TWA: 3 ppm 8 hours. TWA: 6 mg/m³ 8 hours.</p>

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

D0161394 v6.0

8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Clear.
- Odor** : Citrus
- Odor threshold** : Not available.
- pH** : 10.5 to 11.5 [Conc. (% w/w): 100%]
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Closed cup: >93.3°C (>199.9°F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : Not available.
- Solubility** : Easily soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.
- Flow time (ISO 2431)** : Not available.

D0161394 v6.0

10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Keep away from extreme heat. Keep from freezing. Protect from moisture.
Incompatible materials	: Do not mix with household chemicals.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-aminoethanol Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides *Lysol Brand II Kills 99.9% of Viruses & Bacteria** Power Kitchen Cleaner Grease & Sparkle	LD50 Oral	Rat	1720 mg/kg	-
	LD50 Oral	Rat	344 mg/kg	-
	LC50 Inhalation Vapor	Rat	>2.23 mg/l	4 hours
	LD50 Dermal	Rabbit	>5050 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary : Not classified * Information is based on toxicity test result of a similar product.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-aminoethanol	Eyes - Severe irritant	Rabbit	-	250 Micrograms	-
	Skin - Moderate irritant	Rabbit	-	505 milligrams	-
dodecyldimethylamine oxide	Eyes - Severe irritant	Rabbit	-	1 Percent	-
	Skin - Mild irritant	Human	-	48 hours 3.7 Percent	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides *Lysol Brand II Kills 99.9% of Viruses & Bacteria** Power Kitchen Cleaner Grease & Sparkle	Skin - Severe irritant	Rabbit	-	25 milligrams	-
	Eyes - Cornea opacity	Rabbit	>1	-	-
	Skin - Edema	Rabbit	0	-	-

Conclusion/Summary

Skin : Non-irritant to skin. * Information is based on toxicity test result of a similar product.

Eyes : Severely irritating to eyes. * Information is based on toxicity test result of a similar product.

D0161394 v6.0

11. Toxicological information

Sensitization

Product/ingredient name	Route of exposure	Species	Result
*Lysol Brand II Kills 99.9% of Viruses & Bacteria** Power Kitchen Cleaner Grease & Sparkle	skin	Guinea pig	Sensitizing

Conclusion/Summary

Skin : Skin sensitizer *Information is based on toxicity test result of a similar product.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
 irritation
 watering
 redness
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
 irritation
 redness
Ingestion : No specific data.

D0161394 v6.0

11. Toxicological information

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	Acute EC50 0.016 mg/l	Daphnia	48 hours
	Acute LC50 64 ppb Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

D0161394 v6.0

12. Ecological information

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

Not a DOT controlled material (United States). Not a TDG-controlled material. This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

15. Regulatory information

U.S. Federal regulations : **TSCA 4(a) proposed test rules:** Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides
TSCA 8(a) PAIR: 1-phenoxypropan-2-ol; 2-methylundecanal; 3-p-cumenyl-2-methylpropionaldehyde
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

D0161394 v6.0

15. Regulatory information

No products were found.

State regulations

- Massachusetts** : None of the components are listed.
- New York** : None of the components are listed.
- New Jersey** : None of the components are listed.
- Pennsylvania** : None of the components are listed.

Canada

- WHMIS (Canada)** : Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

- Canadian NPRI** : None of the components are listed.
- CEPA Toxic substances** : None of the components are listed.
- Canada inventory** : All components are listed or exempted.

Label elements

- Signal word:** : WARNING
- Hazard statements** : Causes substantial but temporary eye injury
- Precautionary measures** : Keep out of reach of children.
Do not get in eyes, on skin or on clothing.
Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Skin sensitizer:** : Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals

16. Other information

Hazardous Material Information System (U.S.A.) :

Health	2
Flammability	0
Physical hazards	0
Personal protection	B

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



D0161394 v6.0

16. Other information

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

Date of issue : 25/10/2016

Date of previous issue : 02/03/2016.

Version : 6

Prepared by : Reckitt Benckiser LLC.
Product Safety Department
1 Philips Parkway
Montvale, New Jersey 07646-1810 USA.
FAX: 201-476-7770

Revision comments : Added lemon scent to official name.

☑ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



RB is a member of the CSPA Product Care Product Stewardship Program.

SAFETY DATA SHEET

Lysol® Brand III Disinfectant Spray, All Scents



HEALTH • HYGIENE • HOME

1. Product and company identification

Product name : Lysol® Brand III Disinfectant Spray, All Scents

Distributed by : Reckitt Benckiser LLC.
 Morris Corporate Center IV
 399 Interpace Parkway (P.O. Box 225)
 Parsippany, New Jersey 07054-0225
 +1 973 404 2600

Emergency telephone number (Medical) : 1-800-338-6167

Emergency telephone number (Transport) : 1-800-424-9300 (U.S. & Canada) CHEMTREC
 Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

Website: : <http://www.rbnainfo.com>

Product use : Disinfectant.

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS # : D0224478 v8.0

Formulation #: : 1338-022 (0175933 v1.0) Original
 1338-022 (8083521 v1.0) Original
 1338-019 (0175919 v1.0) Country
 1338-019 (8080039 v1.0) Campestre
 1338-016 (0175935 v1.0) Summer Breeze
 1338-018 (0175934 v1.0) Green Apple / Green Apple Breeze
 1338-017 (0175927 v1.0) Kitchen (Citrus)
 1338-021 (0175938 v1.0) Crisp Berry
 1338-020 (0175932 v1.0) Garden Mist
 1338-020 (8089468 v1.0) Bebe
 1338-015 (0175918 v1.0) Spring Waterfall
 1338-015 (0258756 v1.0) Blr Swf Ext Prd
 1178-172 (0175917 v1.0) Crisp Linen
 1178-172 (8089462 v1.0) Frescura
 1178-172 (0242193 v1.0) Blr C/L Ext Prd
 1338-026 (0175929 v1.0) Early Morning Breeze
 1314-032 (0175926 v1.0) Citrus Meadows
 1544-074 (0175943 v2.0) Vanilla & Blossoms
 1314-038 (0175920 v1.0) Jasmine & Rain / Lavender
 e0002-161 (8159483 v1.0) Pomegranate Crush
 1784-045A (0346500 v1.0) Crisp Mountain Air
 1325-133 (0222651 v1.0) Amphyl
 1338-023 (0175940 v1.0) Fresh / Oxygen

EPA ID No. : 777-99

D0224478 v8.0

1. Product and company identification

UPC Code / Sizes : Sizes: 6 oz., 12 oz., 12.5 oz. and 19 oz. (Tin plate steel cans).

2. Hazards identification

Classification of the substance or mixture : FLAMMABLE AEROSOLS - Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Flammable aerosol.
Pressurized container: may burst if heated.

Precautionary statements

General : Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Pressurized container: may burst if heated. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Wash hands thoroughly after handling.

Response : Not applicable.

Storage : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal : Not applicable.

Supplemental label elements : None known.

Hazards not otherwise classified : None known.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Ethyl alcohol	30 - 60	64-17-5
butane	1-5	106-97-8
propane	<2.5	74-98-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : May cause eye irritation upon direct contact with eyes.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
irritation
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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6. Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Conditions for safe storage, including any incompatibilities : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits

Ingredient name	Exposure limits
Ethyl alcohol	<p>ACGIH TLV (United States, 6/2013). STEL: 1000 ppm 15 minutes.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2013). TWA: 1000 ppm 10 hours. TWA: 1900 mg/m³ 10 hours.</p> <p>OSHA PEL (United States, 2/2013). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours.</p>
butane	<p>OSHA PEL 1989 (United States, 3/1989). TWA: 800 ppm 8 hours. TWA: 1900 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2013). TWA: 800 ppm 10 hours. TWA: 1900 mg/m³ 10 hours.</p> <p>ACGIH TLV (United States, 6/2013). STEL: 1000 ppm 15 minutes.</p>
propane	<p>OSHA PEL 1989 (United States, 3/1989).</p>

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8. Exposure controls/personal protection

TWA: 1000 ppm 8 hours.
 TWA: 1800 mg/m³ 8 hours.
NIOSH REL (United States, 10/2013).
 TWA: 1000 ppm 10 hours.
 TWA: 1800 mg/m³ 10 hours.
OSHA PEL (United States, 2/2013).
 TWA: 1000 ppm 8 hours.
 TWA: 1800 mg/m³ 8 hours.

- Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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9. Physical and chemical properties

Appearance

Physical state	: Liquid. [Aerosol.]
Color	: Clear.
Odor	: Characteristic.
Odor threshold	: Not available.
pH	: 10.5 to 11.8 [Conc. (% w/w): 100%]
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: 25.6°C (78.1°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.8667 to 0.8967 g/cm ³ [20 to 25°C]
Solubility	: Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.

Aerosol product

Type of aerosol	: Spray
Heat of combustion	: 17.99 kJ/g
Ignition distance	: <45.72 cm

10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame).
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ethyl alcohol	LC50 Inhalation Vapor LD50 Oral	Rat Rat	124700 mg/m ³ 7 g/kg	4 hours -
*Lysol® Brand III Disinfectant Spray, All Scents (Aerosol)	LC50 Inhalation Vapor	Rat	>2.12 mg/l	4 hours Maximum attainable concentration

Conclusion/Summary : Not classified Harmful. * Information is based on toxicity test result of the concentrate of a similar product.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Ethyl alcohol	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
*Lysol® Brand III Disinfectant Spray, All Scents (Aerosol)	Eyes - Cornea opacity	Rabbit	< 1	72 hours	4 days
	Skin - Primary dermal irritation index (PDII)	Rabbit	0.3	4 hours	72 hours

Conclusion/Summary

Skin : Slightly irritating to the skin. *Information is based on toxicity test result of the concentrate of a similar product.

Eyes : Moderately irritating to eyes. *Information is based on toxicity test result of the concentrate of a similar product.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Ethyl alcohol	-	1	-

Reproductive toxicity

Not available.

Teratogenicity

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11. Toxicological information

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : May cause eye irritation upon direct contact with eyes.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
irritation
redness
Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

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11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates

Not available.

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Ethyl alcohol	Acute EC50 17.921 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.375 u/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Ethyl alcohol	-0.35	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.



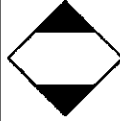


Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

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14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1950	Aerosols, flammable	2.1	-		Limited quantity
TDG Classification	UN1950	Aerosols, flammable	2.1	-		Limited quantity
Mexico Classification	UN1950	Aerosols, flammable	2.1	-		Limited quantity
IMDG Class	UN1950	Aerosols, flammable	2.1	-		Limited quantity
IATA-DGR Class	UN1950	Aerosols, flammable	2.1	-		See DG List

PG* : Packing group

15. Regulatory information

U.S. Federal regulations : TSCA 8(a) PAIR: 2-methylpropan-2-ol
 TSCA 8(a) CDR Exempt/Partial exemption: Not determined
 United States inventory (TSCA 8b): All components are listed or exempted.
 Clean Water Act (CWA) 311: ammonia
 Clean Air Act (CAA) 112 regulated flammable substances: butane; propane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard

D0224478 v8.0

15. Regulatory information

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Ethyl alcohol	30 - 60	Yes.	No.	No.	Yes.	No.

State regulations

- Massachusetts** : The following components are listed: ETHYL ALCOHOL; BUTANE; PROPANE
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: ETHYL ALCOHOL; ALCOHOL; BUTANE; PROPANE
- Pennsylvania** : The following components are listed: DENATURED ALCOHOL; BUTANE; PROPANE

Label elements

- Signal word:** : CAUTION
- Hazard statements** : Causes moderate eye irritation
- Precautionary measures** : Do not get in eyes, on skin, or on clothing. Wash with soap and water.
Keep out of the reach of children.
CONTENTS UNDER PRESSURE. Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 120 °F. Keep away from heat, sparks, open flames and hot surfaces. - No smoking.

Hazard statements :



Flammable

16. Other information

Hazardous Material Information System (U.S.A.) :

Health	1
Flammability	3
Physical hazards	0
Personal protection	B

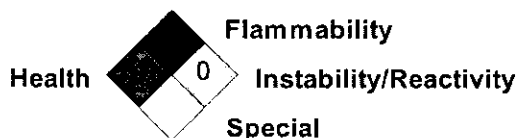
Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :

D0224478 v8.0

16. Other information



NFPA (30B) aerosol Flammability Level 1

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

Date of issue : 26/06/2015.

Date of previous issue : 09/04/2015.

Version : 8

Prepared by : Reckitt Benckiser LLC.
Product Safety Department
1 Philips Parkway
Montvale, New Jersey 07646-1810 USA.
FAX: 201-476-7770

Revision comments : Revision as per US GHS. Correction to NFPA 30B level.

▣ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

D0224478 v8.0

16. Other information



RB is a member of the CSPA Product Care Product Stewardship Program.

SAFETY DATA SHEET

Lysol® Dual Action Disinfecting Wipes
Lysol® Xtra Large Dual Action Wipes



HEALTH · HYGIENE · HOME

1. Product and company identification

Product name : Lysol® Dual Action Disinfecting Wipes
Lysol® Xtra Large Dual Action Wipes

Distributed by : Reckitt Benckiser LLC.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
+1 973 404 2600

Emergency telephone number (Medical) : 1-800-338-6167

Emergency telephone number (Transport) : 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

Website: <http://www.rbnainfo.com>

Product use : Disinfectant. Wipes

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS # : D0289451 v5.0

Formulation #: : Citrus (0356376 v1.0) 1825-054C
Crisp Linen (0356378 v1.0) 1825-106B

EPA ID No. : 777-114

UPC Code / Sizes : 19200 81143 9 (35 wet wipes 7" x 8" sheets, Citrus)
19200 82050 9 (35 wet wipes 7" x 8" sheets, Crisp Linen)
19200 81700 4 (75 wet wipes 7" x 8" sheets, Citrus)
19200 83678 4 (24 wet wipes 8.4" x 10" sheets, Citrus)
19200 83679 1 (50 wet wipes 8.4" x 10" sheets, Citrus)

2. Hazards identification

Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B

GHS label elements

Hazard pictograms : Not applicable.

Signal word : Warning

Hazard statements : Causes eye irritation.

Code # : FF0356376_1_FF0356378_1 **SDS #** : D0289451 v5.0 **Date of issue** : 18/12/2014.
D0289451 v5.0 US
GHS

D0289451 v5.0

2. Hazards identification

Precautionary statements

General	: Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	: Wear eye or face protection. Wash hands thoroughly after handling.
Response	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage	: Not applicable.
Disposal	: Not applicable.
Supplemental label elements	: None known.
Hazards not otherwise classified	: None known.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Ethyl alcohol	1 - 2.5	64-17-5
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	0.1-1	68424-85-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

D0289451 v5.0

4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : May be irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits

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8. Exposure controls/personal protection

Ingredient name	Exposure limits
Ethyl alcohol	<p>ACGIH TLV (United States, 6/2013). STEL: 1000 ppm 15 minutes.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2013). TWA: 1000 ppm 10 hours. TWA: 1900 mg/m³ 10 hours.</p> <p>OSHA PEL (United States, 2/2013). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours.</p>

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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9. Physical and chemical properties

Appearance

Physical state	: Solid. [Presaturated Wipes]
Color	: Not available.
Odor	: Characteristic.
Odor threshold	: Not available.
pH	: 10.5 [Conc. (% w/w): 100%] (liquid preparation)
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Closed cup: >93.3°C (>199.9°F) (liquid preparation)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.97 to 0.996 g/cm ³ [20 to 25°C] (liquid preparation)
Solubility	: Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.

10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
*Lysol® Dual Action Disinfecting Wipes	LC50 Inhalation Vapor	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-
	LC50 Inhalation Vapor	Rat	>2.04 mg/l	14 days
	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

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11. Toxicological information

Conclusion/Summary : Not classified Harmful *Information is based on toxicity test result of the concentrate of a similar product.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
*Lysol® Dual Action Disinfecting Wipes	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Slight irritant	Rabbit	1.2	-	-

Conclusion/Summary

Skin : Slightly irritating to the skin. *Information is based on toxicity test result of the concentrate of a similar product.

Eyes : Moderately irritating to eyes. *Information is based on toxicity test result of the concentrate of a similar product.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
*Lysol® Dual Action Disinfecting Wipes	skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin : Non-sensitizer to skin. *Information is based on toxicity test result of the concentrate of a similar product.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Ethyl alcohol	-	1	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

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11. Toxicological information

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes eye irritation.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : May be irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
irritation
watering
redness
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

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11. Toxicological information

Acute toxicity estimates

Not available.

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Ethyl alcohol	Acute EC50 17.921 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.375 µl/L Fresh water	Fish - Gambusia holbrooki - Larvae	12 weeks

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Ethyl alcohol	-0.35	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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14. Transport information

Not a DOT controlled material (United States). Not a TDG-controlled material. This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

15. Regulatory information

U.S. Federal regulations : **TSCA 4(a) proposed test rules:** Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides
TSCA 8(a) PAIR: 2-methylpropan-2-ol; octanal; decanal; 2-methylundecanal; α -hexylcinnamaldehyde; phenylacetaldehyde
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): Not determined.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Ethyl alcohol	1 - 2.5	Yes.	No.	No.	Yes.	No.

State regulations

Massachusetts : The following components are listed: ETHYL ALCOHOL

New York : None of the components are listed.

New Jersey : The following components are listed: ETHYL ALCOHOL; ALCOHOL

Pennsylvania : The following components are listed: DENATURED ALCOHOL

Label elements

Signal word: : CAUTION

Hazard statements : May cause eye irritation.

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15. Regulatory information

Precautionary measures : Keep out of reach of children.
 Avoid contact with eyes.
 Wash hands after use.

16. Other information

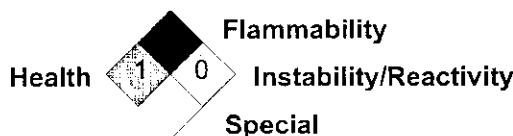
Hazardous Material Information System (U.S.A.) :

Health	1
Flammability	1
Instability/Reactivity	0
Personal protection	A

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

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Version : 5

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16. Other information

Prepared by : Reckitt Benckiser LLC.
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Revision comments : Update of SDS per US GHS.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



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