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FLINN SCIENTIFIC, INC. Safety Data Sheet (SDS)

SDS #: 361.50

Revision Date: March 21, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Gallium

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word

WARNING

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2B). Causes skin and eye irritation (H315+H320).

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 (P305+P351+P338). If eye irritation persists: 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

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.

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SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.

Keep refrigerated 2-8°C. Moisture sensitive material.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280).

Wash hands thoroughly after handling (P264).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Silvery/white solid at or below room temperature. Odorless.

Soluble: Acid and alkalies. Slightly in mercury.

Boiling point: 2403 °C Melting point: 29.78 °C

Specific gravity: 5.9037

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong acids, strong oxidizers, halogens, and strong bases.

Shelf life: Poor, moisture sensitive. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Corrosive, possible irritant.

Chronic effects: Depression of bone marrow function. Metallic

taste, anorexia, nausea, vomiting.

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 #27a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Gallium; Hazard class: 8, Corrosive; UN number: UN2803

N/A = Not applicable

SECTION 15 -- REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-163-8).

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).

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

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SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: Gamvar Satin Picture Varnish

Gamvar Matte Picture Varnish

Product Description: Resin and odorless mineral spirit mixture

Intended Use: Final coating on artist paintings

COMPANY

Company Name: Gamblin Artists Colors
Company Address: 323 SE Division Pl.

Portland, OR 97202

USA

Company Phone: 503-235-1945

Emergency Phone: Local Emergency Room

SECTION 2: HAZARDS IDENTIFICATION

GHS LABELING

GHS Classification: Flammable liquid Category 4

Aspiration toxicant Category 1

GHS Pictogram(s):



Signal Word: Danger

HAZARDS

Hazard Statements:

H227 Combustible liquid

H304 May be fatal if swallowed and enters airways

Precautionary Statements:

P210 Keep away from flames and hot surfaces. -- No smoking P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or

doctor/physician

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P331 Do NOT induce vomiting

P370 + P378 In case of fire: Use water fog, foam, dry chemical or carbon dioxide

(CO2) to extinguish

P403 + P235 Store in a well-ventilated place. Keep cool

P405 Store locked up

P501 Dispose of contents and container in accordance with local regulations

Potential Health Effects:

Eyes May cause redness or irritation

Skin May cause rash, cracking, dryness, or deflating of the skin Ingestion May cause nausea, gastrointestinal irritation, or vomiting

Inhalation May cause dizziness, nausea, headache, and possible nervous system depression

Acute Health Hazards:

If swallowed, may be aspirated and cause lung damage

Chronic Health Hazards:

Skin contact may aggravate existing dermatitis

Environmental Hazards:

No significant hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Contains: Odorless mineral spirits CAS# 64742-48-9

Hydrocarbon resin CAS# 68441-37-2
Beeswax CAS# 8012893
Silicone Dioxide CAS# 112926-00-8

SECTION 4: FIRST AID MEASURES

Eyes: Flush thoroughly with water. If irritation persists, get medical attention.

Skin: Wash contact areas with soap and water. Remove contaminated clothing. Launder

contaminated clothing before reuse.

Inhalation: Remove from further exposure. For those providing assistance, avoid exposure to

yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance.

Ingestion: Do not induce vomiting. Seek medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: If ingested material may be aspirated into the lungs and cause chemical pneumonia. Treat appropriately.

SECTION 5: FIRE FIGHTING MEASURES

FIRE FIGHTING

Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames. **Special Fire Fighting Procedures:**

Combustible. Evacuate area. Prevent runoff from fire control or dilution From entering streams, sewers, or drinking water supplies. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

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Hazardous Combustion Products:

Smoke, Fume, Incomplete combustion products. Oxides of carbon.

Inappropriate Extinguishing Media:

Straight streams of water

FLAMMABILITY PROPERTIES

NFPA Hazard Classification: HMIS Hazard Classification:

Health 1 Health 1 Flammability 2 Flammability 2 Reactivity 0 Reactivity 0 Other N/A Protection N/D

Flammable Limits in Air: LEL 0.7 UEL 5.3

Flash Point: >144°F 62°C [ASTM D-93]

Autoignition Temperature: 635°F 335°C

SECTION 6: ACCIDENTAL RELEASE MEASURES

Material Spill Steps: Remove all sources of ignition (no smoking, flares, sparks or flames in immediate

area).

Soak up spill with absorbent materials.

Waste Disposal: Rags and other absorbent materials should be immersed in water.

Small amounts can be dried and disposed of as regular trash.

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard.

Storage: Keep container closed. Handle containers with care.

Open slowly in order to control possible pressure release.

Store in a cool, well-ventilated area.

Suitable Containers/Packing: Original packaging, other childproof containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

FORM	STANDARD	RECOMMENDED LIMIT	SOURCE
Vapor	PEL-TWA	500ppm	OSHA
Vapor	PEL-TWA	2900mg/m3	OSHA
Vapor	RCP-TWA	1200mg/m3	EU HSPA
Vapor	PEL-TWA	100ppm	ACGIH

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PERSONAL PROTECTION

Equipment: Personal Protective equipment selections vary based on potential exposure conditions

such as applications, handling practices, concentrations and ventilation.

ENGINEERING CONTROLS

Ventilation: Adequate ventilation should be provided so that exposure limits are not exceeded. **Hygiene:** 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. Discard contaminated clothing and footwear that cannot be

cleaned. Practice good housekeeping.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations. Always use material as directed and maintain proper ventilation.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION

Physical State: Liquid
Form: Milky/Clear
Color: Colorless
Odor: Odorless
Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Boiling Point: 365-412°F 185-211°C

Flash Point: >144°F 61°C [ASTM D-93]

Pour Point: -71°F -57°C

Melting Point: N/D Freezing Point: N/D

Vapor Pressure: 0.064 kPa (0.48 mm Hg) at 20°C

0.13 kPa (0.98 mm Hg) at 38°C

0.28 kPa (2.1 mm Hg) at 50°C

Relative Density: N/D **Density:** N/D

Vapor Density: (AIR = 1): 5.6 at 101 kPa (calculated)

Specific Gravity: N/D

Evaporation Rate: (n-butyl acetate = 1): < 0.1

Solubility in Water: Negligible
Solids by Weight: N/D
Volatile: N/D
Molecular Weight: 163
Viscosity: N/D
pH: N/A
Hygroscopic: No

Log Pow (n-Octanol/Water Partition Coefficient):

N/D

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Coefficient of Thermal Expansion:

0.00078 V/VDEGC

SECTION 10: STABILITY AND REACTIVITY

Stability: Material is stable under normal conditions

Conditions to Avoid: Avoid heat, sparks, open flames and other ignition sources

Materials to Avoid: N/D

Hazardous Decomposition or Bi-Products:

Material does not decompose at ambient temperatures

Possibility of Hazardous Reactions:

Hazardous polymerization will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

HAZARD CLASS	CONCLUSION/REMARKS
Inhalation	
Toxicity	Minimally Toxic
Irritation	Negligible hazard at ambient/normal handling temperatures. Based on test data for structurally similar materials.
Ingestion	
Toxicity: LD50 > 10000 mg/kg	Minimally Toxic
Skin	
Toxicity: LD50 > 3160 mg/kg	Minimally Toxic
Irritation	May dry the skin leading to discomfort and dermatitis. Based on test data for structurally similar materials.
Eye	
Irritation	May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials.

CHRONIC/OTHER EFFECTS:

Vapor/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects including death. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

SECTION 12: ECOLOGICAL INFORMATION

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ECOLOGICAL INFORMATION

Ecotoxicity: Not expected to be harmful to aquatic organisms.

Not expected to demonstrate chronic toxicity to aquatic organisms.

PERSISTENCE AND MOBILITY

Biodegradation: Expected to be readily biodegradable.

Hydrolysis: Transformation due to hydrolysis is not expected to be significant. **Photolysis:** Transformation due to photolysis is not expected to be significant.

Atmospheric: Expected to degrade rapidly in air.

SECTION 13: DISPOSAL CONSIDERATIONS

NOTE: Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at the time of disposal.

Waste Disposal: Dispose of waste, residues and empty container in accordance with local authority

requirements.

RCRA Information: The unused product is not specifically listed by the EPA as a hazardous waste (40 CFR,

Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity

Characteristic Leaching Procedure (TCLP)

SECTION 14: TRANSPORT INFORMATION

LAND (DOT)

Proper Shipping Name: Petroleum distillates, N.O.S.

Hazard Class: Combustible liquid

ID Number:1268Packing Group:111ERG Number:128Label(s):None

Transport Doc. Name: UN1268, PETROLEUM DISTILLATES, N.O.S., COMBUSTIBLE LIQUID, PG III

NOTE: This material is not regulated under 49 CFR in a container of 119 gallon capacity or less when transported solely by land, as long as the material is not a hazardous waste, a marine pollutant, or specifically listed as a hazardous substance.

LAND (TDG)

Not Regulated for Land Transport

SEA (IMDG)

Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA)

Not Regulated for Air Transport

SECTION 15: REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD:

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When used for its intended purpose, this material is classified as hazardous in accordance with OSHA 29CFR 1910.1200.

NATIONAL CHEMICAL INVENTORY LISTING:

AICS, IECSC, DSL, EINECS, ENCS, KECI, PICCS, TSCA

EPCRA: This material contains no extremely hazardous substances.

CERCLA: This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLA petroleum exclusion applies for this

product. Contact local authorities to determine if other reporting requirements apply.

SARA (311/312) REPORTABLE HAZARD CATEGORIES:

Fire

SARA (313) TOXIC RELEASE INVENTORY:

This material contains no chemicals subject to the supplier notification requirement of the SARA 313 Toxic Release Program.

STATE REGULATIONS:

None found

INTERNATIONAL REGULATIONS:

None found

SECTION 16: OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Updates made in accordance with implementation of GHS requirements.

The information and recommendations contained herein are, to the best of Gamblin's knowledge and belief, accurate and reliable, but it is not warranted to be. You can contact Gamblin to ensure that this document is the most current available. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use and it is the user's responsibility to carefully read the product label and follow instructions for safe use of the product.



Material Name: Gasoline All Grades

SDS No. 9950

US GHS

Synonyms: Hess Conventional (Oxygenated and Non-oxygenated) Gasoline; Reformulated Gasoline (RFG); Reformulated Gasoline Blendstock for Oxygenate Blending (RBOB); Unleaded Motor or Automotive Gasoline

* * * Section 1 - Product and Company Identification * * *

Manufacturer Information

Hess Corporation 1 Hess Plaza Woodbridge, NJ 07095-0961 Phone: 732-750-6000 Corporate EHS Emergency # 800-424-9300 CHEMTREC

www.hess.com (Environment, Health, Safety Internet Website)

* * * Section 2 - Hazards Identification * * *

GHS Classification:

Flammable Liquid - Category 2

Skin Corrosion/Irritation - Category 2

Germ Cell Mutagenicity - Category 1B

Carcinogenicity - Category 1B

Toxic to Reproduction - Category 1A

Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)

Specific Target Organ Toxicity (Repeat Exposure) - Category 1 (liver, kidneys, bladder, blood, bone marrow, nervous system)

Aspiration Hazard - Category 1

Hazardous to the Aquatic Environment - Acute Hazard - Category 3

GHS LABEL ELEMENTS

Symbol(s)







Signal Word

DANGER

Hazard Statements

Highly flammable liquid and vapour.

Causes skin irritation.

May cause genetic defects.

May cause cancer.

May damage fertility or the unborn child.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Causes damage to organs (liver, kidneys, bladder, blood, bone marrow, nervous system) through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

Harmful to aquatic life.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands and forearms thoroughly after handling.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe mist/vapours/spray.

Use only outdoors or in well-ventilated area.

Do not eat, drink or smoke when using this product.

Avoid release to the environment.

Response

In case of fire: Use water spray, fog, dry chemical fire extinguishers or hand held fire extinguisher.

IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

IF INHALED: 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.

Get medical advice/attention if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.

Storage

Store in a well-ventilated place.

Keep cool. Keep container tightly closed.

Store locked up.

Disposal

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

* * * Section 3 - Composition / Information on Ingredients * * *

CAS#	Component	Percent
86290-81-5	Gasoline, motor fuel	100
108-88-3	Toluene	1-25
106-97-8	Butane	<10
1330-20-7	Xylenes (o-, m-, p- isomers)	1-15
95-63-6	Benzene, 1,2,4-trimethyl-	<6
64-17-5	Ethyl alcohol	0-10
100-41-4	Ethylbenzene	<3
71-43-2	Benzene	0.1-4.9

Material Name: Gasoline All Grades SDS No. 9950

110-54-3 Hexane 0.5-4

A complex blend of petroleum-derived normal and branched-chain alkane, cycloalkane, alkene, and aromatic hydrocarbons. May contain antioxidant and multifunctional additives. Non-oxygenated Conventional Gasoline and RBOB do not have oxygenates (Ethanol). Oxygenated Conventional and Reformulated Gasoline will have oxygenates for octane enhancement or as legally required.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops.

First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. Flowing product may be ignited by self-generated static electricity. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or gaseous extinguishing agent.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Firefighting foam suitable for polar solvents is recommended for fuel with greater than 10% oxygenate concentration.

Unsuitable Extinguishing Media

None

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Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Prevention of Secondary Hazards

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

USE ONLY AS A MOTOR FUEL. DO NOT SIPHON BY MOUTH

Handle as a flammable liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

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Material Name: Gasoline All Grades

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Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

Incompatibilities

Keep away from strong oxidizers.

Section 8 - Exposure Controls / Personal Protection

Component Exposure Limits

Gasoline, motor fuel (86290-81-5)

ACGIH: 300 ppm TWA

500 ppm STEL

Toluene (108-88-3)

ACGIH: 20 ppm TWA

OSHA: 200 ppm TWA; 375 mg/m3 TWA

150 ppm STEL; 560 mg/m3 STEL

NIOSH: 100 ppm TWA; 375 mg/m3 TWA

150 ppm STEL; 560 mg/m3 STEL

Butane (106-97-8)

ACGIH: 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4)

800 ppm TWA; 1900 mg/m3 TWA OSHA: NIOSH: 800 ppm TWA; 1900 mg/m3 TWA

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: 100 ppm TWA

150 ppm STEL

100 ppm TWA; 435 mg/m3 TWA OSHA:

150 ppm STEL; 655 mg/m3 STEL

Benzene, 1,2,4-trimethyl- (95-63-6)

NIOSH: 25 ppm TWA; 125 mg/m3 TWA

Ethyl alcohol (64-17-5)

ACGIH: 1000 ppm STEL

OSHA: 1000,ppm TWA; 1900 mg/m3 TWA NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA

Material Name: Gasoline All Grades SDS No. 9950

Ethylbenzene (100-41-4)

ACGIH: 20 ppm TWA

OSHA: 100 ppm TWA; 435 mg/m3 TWA

125 ppm STEL; 545 mg/m3 STEL

NIOSH: 100 ppm TWA; 435 mg/m3 TWA

125 ppm STEL; 545 mg/m3 STEL

Benzene (71-43-2)

ACGIH: 0.5 ppm TWA

2.5 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action

Level; 1 ppm TWA

NIOSH: 0.1 ppm TWA

1 ppm STEL

Hexane (110-54-3)

ACGIH: 50 ppm TWA

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 500 ppm TWA; 1800 mg/m3 TWA NIOSH: 50 ppm TWA; 180 mg/m3 TWA

Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eves

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

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Section 9 - Physical & Chemical Properties

Translucent, straw-colored or Appearance:

Strong, characteristic aromatic

light yellow

hydrocarbon odor. Sweet-ether

like

Physical State: Liquid

ND

Vapor Pressure:

6.4 - 15 RVP @ 100 °F (38 °C)

Vapor Density: AP 3-4

(275-475 mm Hg @ 68 °F (20

Boiling Point: 85-437 °F (39-200 °C) Melting Point:

Solubility (H2O):

Negligible to Slight

Specific Gravity:

0.70-0.78 VOC:

Evaporation Rate: 10-11

Octanol/H2O Coeff.: ND

Percent Volatile: 100% Flash Point: -45 °F (-43 °C)

Flash Point Method: PMCC

Upper Flammability Limit 7.6%

Burning Rate: ND

Lower Flammability Limit 1.4%

(UFL):

(LFL): Auto Ignition: >530°F (>280°C)

Section 10 - Chemical Stability & Reactivity Information

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

Incompatible Products

Keep away from strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

Section 11 - Toxicological Information

Acute Toxicity

A: General Product Information

Harmful if swallowed.

B: Component Analysis - LD50/LC50

Gasoline, motor fuel (86290-81-5)

Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat 14000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Toluene (108-88-3)

Inhalation LC50 Rat 12.5 mg/L 4 h; Inhalation LC50 Rat >26700 ppm 1 h; Oral LD50 Rat 636 mg/kg; Dermal LD50 Rabbit 8390 mg/kg; Dermal LD50 Rat 12124 mg/kg

Butane (106-97-8)

Inhalation LC50 Rat 658 mg/L 4 h

Material Name: Gasoline All Grades

SDS No. 9950

Xylenes (o-, m-, p- isomers) (1330-20-7)

Inhalation LC50 Rat 5000 ppm 4 h; Inhalation LC50 Rat 47635 mg/L 4 h; Oral LD50 Rat 4300 mg/kg; Dermal LD50 Rabbit >1700 mg/kg

Benzene, 1,2,4-trimethyl- (95-63-6)

Inhalation LC50 Rat 18 g/m3 4 h; Oral LD50 Rat 3400 mg/kg; Dermal LD50 Rabbit >3160 mg/kg

Ethyl alcohol (64-17-5)

Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h

Ethylbenzene (100-41-4)

Inhalation LC50 Rat 17.2 mg/L 4 h; Oral LD50 Rat 3500 mg/kg; Dermal LD50 Rabbit 15354 mg/kg

Benzene (71-43-2)

Inhalation LC50 Rat 13050-14380 ppm 4 h; Oral LD50 Rat 1800 mg/kg

Hexane (110-54-3)

Inhalation LC50 Rat 48000 ppm 4 h; Oral LD50 Rat 25 g/kg; Dermal LD50 Rabbit 3000 mg/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Moderate irritant. Contact with liquid or vapor may cause irritation.

Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

This product may cause genetic defects.

Carcinogenicity

A: General Product Information

May cause cancer.

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Material Name: Gasoline All Grades

SDS No. 9950

IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain.

This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

B: Component Carcinogenicity

Gasoline, motor fuel (86290-81-5)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

Toluene (108-88-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Ethyl alcohol (64-17-5)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic

beverages) (Group 1 (carcinogenic to humans))

Ethylbenzene (100-41-4)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans IARC: Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans))

Benzene (71-43-2)

ACGIH: A1 - Confirmed Human Carcinogen

OSHA: 5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action

Level; 1 ppm TWA

NIOSH: potential occupational carcinogen

NTP: Known Human Carcinogen (Select Carcinogen)

IARC: Monograph 100F [in preparation]; Supplement 7 [1987]; Monograph 29 [1982] (Group 1

(carcinogenic to humans))

Reproductive Toxicity

This product is suspected of damaging fertility or the unborn child.

Specified Target Organ General Toxicity: Single Exposure

This product may cause drowsiness or dizziness.

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Material Name: Gasoline All Grades

SDS No. 9950

Specified Target Organ General Toxicity: Repeated Exposure

This product causes damage to organs through prolonged or repeated exposure.

Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

Very toxic to aquatic life with long lasting effects. Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Gasoline, motor fuel (86290-81-5)

Test & Species Conditions

96 Hr LC50 Alburnus alburnus 119 mg/L [static] 96 Hr LC50 Cyprinodon variegatus 82 mg/L [static]

72 Hr EC50 Pseudokirchneriella 56 mg/L

subcapitata

24 Hr EC50 Daphnia magna 170 mg/L

Toluene (108-88-3)

Test & Species Conditions

96 Hr LC50 Pimephales promelas 15.22-19.05 mg/L 1 day old [flow-through] 96 Hr LC50 Pimephales promelas 12.6 mg/L [static]

96 Hr LC50 Oncorhynchus mykiss 5.89-7.81 mg/L [flow-through] 96 Hr LC50 Oncorhynchus mykiss 14.1-17.16 mg/L

[static] 96 Hr LC50 Oncorhynchus mykiss 5.8 mg/L [semi-

96 Hr LC50 Lepomis macrochirus static] 11.0-15.0 mg/L

[static] 96 Hr LC50 Oryzias latipes 54 mg/L [static] 96 Hr LC50 Poecilia reticulata 28.2 mg/L [semi-

static] 96 Hr LC50 Poecilia reticulata 50.87-70.34 mg/L

[static] 96 Hr EC50 Pseudokirchneriella >433 mg/L

subcapitata

72 Hr EC50 Pseudokirchneriella 12.5 mg/L [static]

subcapitata
48 Hr EC50 Daphnia magna
5,46 - 9.83 mg/L

48 Hr EC50 Daphnia magna [Static]

Xylenes (o-, m-, p- isomers) (1330-20-7)

Test & Species Conditions

96 Hr LC50 Pimephales promelas 13.4 mg/L [flow-through]

Material Name: Gasoline All Grades

SDS No. 9950

96 Hr LC50 Oncorhynchus mykiss 96 Hr LC50 Oncorhynchus mykiss	[static]
96 Hr LC50 Lepomis macrochirus	•
96 Hr LC50 Lepomis macrochirus	19 mg/L
96 Hr LC50 Lepomis macrochirus	7.711-9.591 mg/L [static]
96 Hr LC50 Pimephales promelas	23.53-29.97 mg/L [static]
96 Hr LC50 Cyprinus carpio	780 mg/L [semi- static]
96 Hr LC50 Cyprinus carpio	>780 mg/L
96 Hr LC50 Poecilia reticulata	30.26-40.75 mg/L [static]
48 Hr EC50 water flea	3.82 mg/L
48 Hr LC50 Gammarus lacustris	0.6 mg/L

Benzene, 1,2,4-trimethyl- (95-63-6)

Test & Species

7.19-8.28 mg/L 96 Hr LC50 Pimephales promelas [flow-through] 6.14 mg/L 48 Hr EC50 Daphnia magna

Ethyl alcohol (64-17-5) **Test & Species**

12.0 - 16.0 mL/L 96 Hr LC50 Oncorhynchus mykiss [static] 96 Hr LC50 Pimephales promelas >100 mg/L [static] 96 Hr LC50 Pimephales promelas 13400 - 15100 mg/L [flow-through] 9268 - 14221 mg/L 48 Hr LC50 Daphnia magna 10800 mg/L 24 Hr EC50 Daphnia magna 2 mg/L [Static] 48 Hr EC50 Daphnia magna

Ethylbenzene (100-41-4)

Test & Species

11.0-18.0 mg/L 96 Hr LC50 Oncorhynchus mykiss [static] 96 Hr LC50 Oncorhynchus mykiss 4.2 mg/L [semistatic] 7.55-11 mg/L [flow-96 Hr LC50 Pimephales promelas through] 32 mg/L [static] 96 Hr LC50 Lepomis macrochirus 96 Hr LC50 Pimephales promelas 9.1-15.6 mg/L [static] 96 Hr LC50 Poecilia reticulata 9.6 mg/L [static] 72 Hr EC50 Pseudokirchneriella 4.6 mg/L

subcapitata 96 Hr EC50 Pseudokirchneriella subcapitata 72 Hr EC50 Pseudokirchneriella

subcapitata

Conditions

Conditions

Conditions

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>438 mg/L

[static]

2.6 - 11.3 mg/L

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Material Name: Gasoline All Grades

SDS No. 9950

96 Hr EC50 Pseudokirchneriella 1.7 - 7.6 mg/L subcapitata [static] 48 Hr EC50 Daphnia magna 1.8 - 2.4 mg/L

Benzene (71-43-2)

Test & Species Conditions

96 Hr LC50 Pimephales promelas
10.7-14.7 mg/L
[flow-through]
96 Hr LC50 Oncorhynchus mykiss
5.3 mg/L [flow-through]
96 Hr LC50 Lepomis macrochirus
22.49 mg/L [static]
96 Hr LC50 Pimephales promelas
22330-41160 µg/L

[static] 96 Hr LC50 Lepomis macrochirus 70000-142000 μg/L

[static] 72 Hr EC50 Pseudokirchneriella 29 mg/L

subcapitata
48 Hr EC50 Daphnia magna

48 Hr EC50 Daphnia magna 8.76 - 15.6 mg/L [Static]

48 Hr EC50 Daphnia magna

Hexane (110-54-3) Test & Species

96 Hr LC50 Pimephales promelas

50 (ii 2000) iiiopilaloo promet

24 Hr EC50 Daphnia magna

Conditions 2.1-2.98 mg/L [flow-

through] >1000 mg/L

10 mg/L

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility in Soil

No information available.

* * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

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

Material Name: Gasoline All Grades

SDS No. 9950

* * * Section 14 - Transportation Information * * *

Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS#	
Gasoline, motor fuel	86290-81-5	DOT regulated marine pollutant

DOT Information

Shipping Name: Gasoline

UN #: 1203 Hazard Class: 3 Packing Group: II

Placard:



* * Section 15 - Regulatory Information * * *

Regulatory Information

A: Component Analysis

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) and/or CERCLA (40 CFR 302.4).

Toluene (108-88-3)

SARA 313: 1.0 % de minimis concentration CERCLA: 1000 lb final RQ; 454 kg final RQ

Xylenes (o-, m-, p- isomers) (1330-20-7)

SARA 313: 1.0 % de minimis concentration CERCLA: 100 lb final RQ; 45.4 kg final RQ

Benzene, 1,2,4-trimethyl- (95-63-6)

SARA 313: 1.0 % de minimis concentration

Ethylbenzene (100-41-4)

SARA 313: 0.1 % de minimis concentration CERCLA: 1000 lb final RQ; 454 kg final RQ

Benzene (71-43-2)

SARA 313: 0.1 % de minimis concentration

CERCLA: 10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an

August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on

potential carcinogenicity in an August 14, 1989 final rule)

Material Name: Gasoline All Grades

SDS No. 9950

Hexane (110-54-3)

SARA 313: 1.0 % de minimis concentration CERCLA: 5000 lb final RQ; 2270 kg final RQ

SARA Section 311/312 - Hazard Classes

Acute Health Chronic Health Fire Sudden Release of Pressure Reactive X X -- --

Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS#	
Gasoline, motor fuel	86290-81-5	DOT regulated marine pollutant

State Regulations

Component Analysis - State

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

Component	CAS	CA	MA	MN	NJ	PA	RI
Gasoline, motor fuel	86290-81-5	No	No	No	No	Yes	No
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes	No
Butane	106-97-8	Yes	Yes	Yes	Yes	Yes	No
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	Yes	Yes	Yes	Yes	No
Benzene, 1,2,4-trimethyl-	95-63-6	No	Yes	Yes	Yes	Yes	No
Ethyl alcohol	64-17-5	Yes	Yes	Yes	Yes	Yes	No
Ethylbenzene	100-41-4	Yes	Yes	Yes	Yes	Yes	No
Benzene	71-43-2	Yes	Yes	Yes	Yes	Yes	No
Hexane	110-54-3	No	Yes	Yes	Yes	Yes	No

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

Revision Date 8/30/12

Material Name: Gasoline All Grades

SDS No. 9950

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum Concentration
Toluene	108-88-3	1 %
Butane	106-97-8	1 %
Benzene, 1,2,4-trimethyi-	95-63-6	0.1 %
Ethyl alcohol	64-17-5	0.1 %
Ethylbenzene	100-41-4	0.1 %
Benzene	71-43-2	0.1 %
Hexane	110-54-3	1 %

Additional Regulatory Information

Component Analysis - Inventory

Component	CAS#	TSCA	CAN	EEC
Gasoline, motor fuel	86290-81-5	No	DSL	EINECS
Toluene	108-88-3	Yes	DSL	EINECS
Butane	106-97-8	Yes	DSL	EINECS
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	DSL	EINECS
Benzene, 1,2,4-trimethyl-	95-63-6	Yes	DSL	EINECS
Ethyl alcohol	64-17-5	Yes	DSL	EINECS
Ethylbenzene	100-41-4	Yes	DSL	EINECS
Benzene	71-43-2	Yes	DSL	EINECS
Hexane	110-54-3	Yes	DSL	EINECS

Section 16 - Other Information

NFPA® Hazard Rating

Health

2

Fire

3

3

0

Reactivity 0

HMIS® Hazard Rating

Health

Moderate 2

Fire

Serious

Physical

Minimal

*Chronic

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Literature References

None

Revision Date 8/30/12

Material Name: Gasoline All Grades SDS No. 9950

Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet

Revision Date 8	3/30/12	

Section 1 Chemical Product and Company Identification

Page E1 of E2

ward's, science

5100 West Henrietta Rd PO Box 92912 Rochester, NY 14692-9012 Tel: (800) 962-2660 Boreal Science 399 Vansickle Road St. Catherines, Ontario L2S 3T4 Canada Tel: (800) 387-9393 CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only. Not for drug, food or household use.

Product GELATIN
Synonyms Protein

Section 2 Re- Hazards Gentification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: Not classified Pictograms: Not classified Target organs: None known

GHS Classification: Not classified

GHS Label information: Hazard statement(s): Not classified

Precautionary statement(s):

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

CAS#	%	EINECS	
9000-70-8	100%	232-554-6	
	WAXABARRA V		
A TOTAL CONTRACTOR OF THE PROPERTY OF THE PROP			

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

den grade la college

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Dust dispersed in air becomes explosive when exposed to ignition sources. If spills become wet, surface will become slippery.

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion, Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Pro	ection		
	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Limits:	Gelatin	None established	TWA: 15 mg/m ³ total dust	None established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Physical & Chemical Properties Section 9

Appearance: Solid, off-white powder.

Odor: No odor.

25

Odor threshold: Data not available.

pH: Data not available

Melting / Freezing point: Decomposes

Boiling point: Decomposes Flash point: Data not available Evaporation rate (= 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available

Vapor pressure (mm Hg): Negligible Vapor density (Air = 1): Data not available Relative density (Specific gravity): >1.0

Solubility(ies): Insoluble in cold water, soluble in boiling water The state of the s

Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available

Viscosity: Data not available. Molecular formula: Natural product Molecular weight: Mixture

Section to the Stability & Reactivity

Hazardous polymerization: Will not occur. Chemical stability: Stable

Conditions to avoid: Excessive temperatures anbd heat.

Incompatible materials: Strong oxidizers.

Hazardous decomposition products: Carbon oxides and nitrogen oxides.

Acute toxicity: Data not available

Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available

Aspiration hazard: Data not available

Potential health effects: Inhalation: No hazard known. Ingestion: No hazard known. Skin: No hazard known.

Eyes: Contact with eyes may cause transient irritation.

Signs and symptoms of exposure: See Potential health effects above.

Additional information: RTECS #: LX8580000

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Section 12 Sept and Colored Bright Br

Toxicity to algae: No data available

Bioaccumulative potential: No data available Persistence and degradability: No data available

PBT and vPvB assessment: No data available Mobility in soil: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Carlot Academic Company of Carlot Company

Shipping name: Not Regulated UN/NA number: Not applicable Packing group: Not applicable Hazard class: Not applicable Exceptions: Not applicable

2012 ERG Guide # Not applicable

Marine pollutant: No Reportable Quantity: No

Supercedes: August 28, 2014

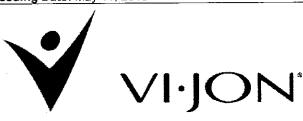
a (Talingla destablication)

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.						
Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	
Gelatin	Listed	Not listed	Not listed	Listed	Not listed	

Product Name: • Revision Date: None

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe

Revision Number: 0



Safety Data Sheet



The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name

053AF Germ-X Hand Sanitizer with Vitamin E and Aloe

Other means of identification

Synonyms

None

Recommended use of the chemical and restrictions on use

Recommended Use

Hand Sanitizer

Uses advised against

Use only as directed

Details of the supplier of the safety data sheet

Supplier Name

Vi-Jon Inc.

Supplier Address

Vi-Jon Inc.

8800 Page Avenue

Saint Louis

MO 63114 US

Supplier Phone Number

Phone: 314-427-1000 (M-F 8am-4pm CST)

Fax:3144271010

Supplier Email

info@vijon.com

Emergency telephone number

Chemtrec: 1-800-424-9300 (24-Hour)

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe

Revision Date: None

Revision Number: 0

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids

Category 3

GHS Label elements, including precautionary statements

Emergency Overview

Signal word

Warning

Flammable liquid and vapor



Appearance: Clear to Slightly Hazy,

Physical State: Slightly Viscous Liquid

Odor: Floral, Alcohol

Pale Green, Slightly Viscous Liquid

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ ventilating/ lighting/ equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Precautionary Statements - Response

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

0.259927% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Toxic to aquatic life

PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION

May cause slight eye irritation

Interactions with Other Chemicals

None known.



Product Name: Revision Date: None

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe

Revision Number: 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Ethyl Alcohol 62% v/v	64-17-5	50 - 100	*
Aloe Barbadensis Leaf Gel	85507-69-3	0 - 10	*
Carbomer	Proprietary	0 – 10	*
FD&C Blue No. 1	3844-45-9	0 – 10	*
FD&C Yellow No. 5	1934-21-0	0 – 10	*
Fragrance	Proprietary	0 – 10	*
Glycerin	56-81-5	0 – 10	*
Isopropyl Alcohol	67-63-0	0 – 10	*
sopropyl Myristate	110-27-0	0 – 10	*
Propylene Glycol	57-55-6	0 - 10	*
Tocopheryl Acetate	7695-91-2	0 - 10	*
Water	7732-18-5	10 - 50	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove

contact lenses, if present and easy to do. Continue rinsing.

Skin Contact In the case of skin irritation or allergic reactions, see a physician.

Inhalation Move to fresh air. Get medical attention immediately if symptoms occur. May

cause allergic respiratory reaction. If breathing has stopped, contact emergency

medical services immediately and give artificial respiration.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water.

Never give anything by mouth to an unconscious person.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take

precautions to protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and No information available.

Effects

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

Product Name: Revision Date: None

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe

Revision Number: 0

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media

CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Vapors can form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

Uniform Fire Code

Flammable Liquid: I-C

Hazardous Combustion Products

Carbon oxides.

Explosion Data_

Sensitivity to Mechanical Impact

No.

Sensitivity to Static Discharge

Yes.

Protective equipment and precautions for firefighters

Move containers from fire area if you can do it without risk.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

All equipment used when handling the product must be grounded. Do not touch or walk

through spilled material. Stop leak if you can do it without risk.

Other Information Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Environmental Precautions

Environmental Precautions Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for Containment A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth,

sand or other non-combustible material and transfer to containers.

Methods for cleaning up

Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for

later disposal. Soak up with inert absorbent material. Pick up and transfer to properly

labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from

heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national

regulations. Store in accordance with local regulations.

Incompatible Products None known based on information supplied.

Product Name: Revision Date: None

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe

Revision Number: 0

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

There is no exposure data pertaining to the Product. This section reflects exposure data pertaining to individual ingredients.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl Alcohol 62% v/v	STEL: 1000 ppm	TWA: 1000 ppm	IDLH: 3300 ppm 10% LEL
64-17-5		TWA: 1900 mg/m ³	TWA: 1000 ppm
		(vacated) TWA: 1000 ppm	TWA: 1900 mg/m ³
		(vacated) TWA: 1900 mg/m ³	
Glycerin	TWA: 10 mg/m³ mist	TWA: 15 mg/m ³ mist, total	···
56-81-5	-	particulate	
		TWA: 5 mg/m ³ mist, respirable	
		fraction	
		(vacated) TWA: 10 mg/m³ mist,	
		total particulate	
		(vacated) TWA: 5 mg/m ³ mist,	
		respirable fraction	

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d

962 (11th Cir., 1992) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures

Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Tight sealing safety goggles.

Skin and Body Protection

Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves. Antistatic boots.

Respiratory Protection

No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

Wash hands before breaks and immediately after handling the product.

Product Name: Revision Date: None

None known

None known

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe

Revision Number: 0

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State Slightly Viscous Liquid

Appearance Clear to Slightly Hazy, Pale Green, Odor Floral, Alcohol

Slightly Viscous Liquid

Color Pale Green Odor Threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks Method</u>

7.0 None known нα No data available None known Melting / freezing point No data available Boiling point / boiling range None known Flash Point 23 C / 73 F None known No data available None known **Evaporation Rate** None known Flammability (solid, gas) No data available

Flammability Limit in Air

Upper flammability limit
Lower flammability limit
No data available
Vapor pressure
No data available

Vapor density No data available None known None known Specific Gravity 0.90 None known Water Solubility Miscible in water None known Solubility in other solvents No data available None known Partition coefficient: n-octanol/waterNo data available No data available None known Autoignition temperature No data available None known Decomposition temperature No data available None known Kinematic viscosity

Dynamic viscosityNo data availableExplosive propertiesNo data availableOxidizing PropertiesNo data available

Other Information

Softening Point

VOC Content (%)

Particle Size

Particle Size Distribution

No data available
No data available
No data available

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon oxides.

When used in accordance with the directions.



Product Number: 053AF Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe Issuing Date: May 11, 2015 Revision Date: None Revision Number: 0

11. TOXICOLOGICAL INFORMATION

There is no data for this product. The information included in this section describes the potential hazards of the individual ingredients.

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye Contact Specific test data for the substance or mixture is not available.

Skin Contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl Alcohol 62% v/v	-	-	= 124.7 mg/L (Rat)4 h
64-17-5			
Glycerin	•	> 10 g/kg (Rabbit)	-
56-81-5			
Isopropyl Myristate	> 10000 mg/kg (Rat)	= 5 g/kg (Rabbit)	> 41 mg/L (Rat)
110-27-0			
Water	> 90 mL/kg (Rat)	-	-
7732-18-5			

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethyl Alcohol 62% v/v	A3	Group 1	Known	X
64-17-5				
FD&C Blue No. 1		Group 3		
3844-45-9				

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive Toxicity

STOT - single exposure

No information available.

No information available.

STOT - repeated exposure No information available.

Chronic Toxicity No known effect based on information supplied. Ethanol has been shown to be a

reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown

to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Target Organ Effects Blood, Central Nervous System (CNS), Eyes, Liver, Reproductive System, Respiratory

system. Skin.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (inhalation-dust/mist)

228.70 mg/l



Product Name: Revision Date: None

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe

Revision Number: 0

12. ECOLOGICAL INFORMATION

There is no ecological data on the Product. The Product ingredients are expected to be safe for the environment at concentrations predicted under normal use and accidental spill scenarios. Packaging components are compatible with the conventional solid waste management practices.

Ecotoxicity

No information available.

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR

261).

Contaminated Packaging Do not reuse empty containers.

US EPA Waste Number D001
California Hazardous Waste Codes 331

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name CONSUMER COMMODITY

Hazard Class ORM-D

Description CONSUMER COMMODITY, ORM-D

Emergency Response Guide 127

Number

TDG

UN-No. UN1170

Proper Shipping Name ETHANOL Hazard Class 3

Packing Group

Description UN1170, ETHANOL, 3, III

<u>MEX</u>

UN-No. UN1170
Proper Shipping Name ETHANOL

Hazard Class 3
Packing Group III

Description UN1170, ETHANOL, 3, III

ICAO

<u>UN-No.</u> UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group |||

Description UN1170, ETHANOL SOLUTION, 3, III

<u>IATA</u>

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class 3
Packing Group III

Description UN1170, ETHANOL SOLUTION, 3, III

Product Number: 053AF Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe Issuing Date: May 11, 2015 Revision Date: None Revision Number: 0

IMDG/IMO

UN-No. UN1170
Proper Shipping Name ETHANOL

Hazard Class 3
Packing Group III
EmS-No. F-E, S-D

Description UN1170, ETHANOL, 3, III

<u>RID</u>

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION Hazard Class 3

Packing Group III
Classification code F1

Description UN1170, ETHANOL SOLUTION, 3, III

<u>ADR</u>

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class3Packing GroupIIIClassification codeF1Tunnel restriction code(D/E)

Description UN1170, ETHANOL SOLUTION, 3, III

ADN

UN-No. UN1170

Proper Shipping Name ETHANOL SOLUTION

Hazard Class3Packing GroupIIIClassification codeF1Special Provisions144, 601

Description UN1170, ETHANOL SOLUTION, 3, III

Hazard Labels3Limited Quantity5 LVentilationVE01

(4)

Product Number: 053AF Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe Issuing Date: May 11, 2015 Revision Date: None Revision Number: 0

15. REGULATORY INFORMATION

International Inventories

TSCA

Complies

DSL

All components are listed either on the DSL or NDSL.

IECSC

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

US State Regulations

California Proposition 65 - NONE

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Ethyl Alcohol 62% v/v		X			
64-17-5					
Carbomer	Х				
9003-01-4					
Glycerin	X	Х	X	X	
56-81-5					

International Regulations

Mexico

National occupational exposure limits

Transfer of the particular oxposure minutes		
Component	Carcinogen Status	Exposure Limits
Ethyl Alcohol 62% v/v		Mexico: TWA 1000 ppm
64-17-5 (50 - 100)		Mexico: TWA 1900 mg/m ³

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

B2 D2A







Product Number: 053AF Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe Issuing Date: May 11, 2015 Revision Date: None Revision Number: 0

16. OTHER INFORMATION

1 Flammability 3 Instability 0 Physical and

Chemical Hazards -

NONE

HMIS Health Hazards 1 Flammability 3 Physical Hazard 0 Personal Protection

Х

Prepared By WERCS Professional Services, LLC

Health Hazards

23 British American Blvd. Latham, NY 12110

1-800-572-6501

Issuing Date

NFPA

May 11, 2015

Revision Date Revision Note None None

General 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 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.

Approved and Updated by Vi-Jon, Inc.

Disclaimer:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

Vi-Jon, however, makes no representation as to the completeness or accuracy thereof, and information is supplied upon the express condition that the persons receiving the information will be required to make their own determination as to its suitability for their purposes prior to use. In no event will Vi-Jon be responsible for any damages of any nature whatsoever resulting from the use of, reliance upon, or the misuse of this information.

No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature, are made hereunder with respect to information or the product to which the information refers. The information as supplied herein is simply to be informative and intended solely to alert the user of the substance which is the subject matter of this SDS. The ultimate compliance with federal, state or local regulations concerning the use of this compound, or compliance with respect to product liability, rests solely upon the purchaser thereof.

End of Safety Data Sheet

REVISED Date: February, 2020 1 of 5

SECTION 1 IDENTIFICATION OF PRODUCT AND MANUFACTURER

SDS is prepared to meet 29 CFR 1910-1200 UN ID 8100

Manufacturer: BRANDS INTERNATIONAL CORPORATION

594 Newpark Blvd, Newmarket. ON. L3X 2S2 Canada

Contact Telephone: 905-830-4404 Fax: 905-853-4404

Product Identification: GERMS BE GONE Hand Sanitizer Clean and Fresh

SECTION 2 Hazardous Chemical Identification

Chemical Name: SDAG -3 (Denatured Alcohol) CAS# 64-17-5 65 min % Isopropyl Alcohol CAS # 67-63-0 < 0.2%

Classification of the mixture

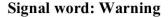
Clear colourless Gel. Alcoholic.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification Flammable Liquids Gel - Category 3 Serious eye damage/eye irritation - Category 2A Label elements

Hazard pictogram(s)





Hazard statement(s)

Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness



Precautionary statement(s)

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat, open flames and hot surfaces. - No smoking.

Keep away from electrical source including static

Do not breath mist or vapor.

If exposed or concerned: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower

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.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Active Ingredient: 65% W/W Non Active Ingredients:

Ingredient	CAS#	%
Water (Aqua)	7732-18-5	30-40.0
Isopropyl Alcohol	67-63-0	0.1-0.5
Glycerin	56-81-5	0.1-0.3
Carbomer	195739-91-4	0.1-0.5
Aminomethyl Propanol	124-68-5	0.1-0.5
Fragrance	N/A	0.1-0.2
Propylene Glycol	57-55-6	0.01-0.05
Isopropyl Myristate	110-27-0	0.01-0.05
Aloe Barbadensis Leaf Extract	85507-69-3	< 0.01
Tocopheryl Acetate (Vit E Acetate)	7695-91-2	< 0.01

SECTION 4. FIRST AID MEASURES

In case of Eye Contact: Flush eyes for 15 minutes with water and contact physician

or Poison Control Center.

In case of Skin Contact: Intended for skin contact. If irritating, flush skin for 15

minutes with water, if irritation continues contact physician

or Poison Control Center.

If Inhaled: Show signs of intoxication, remove person from area and

contact physician or Poison control Center immediately.

If Ingested/ Swallowed: Contact physician or Poison Control Center immediately.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media: Water spray, fog or alcohol resistant foam

Special Firefighting Procedure: Use water spray to cool fire exposed containers and

structures, use water spray to disperse vapor, wear

Self contained breathing apparatus.

Explosion Hazard: Flammable may be ignited by heat/ Sparks/ Flames NFPA Rating Health: 2 Fire: 3 Reactivity: 0 Other: 0

SECTION 6 ACCIDENTAL RELEASE MEASURES

Large Spill: Collect materials with non sparking materials and dispose according to

Local and federal regulations

SECTION 7 HANDLING AND STORAGE

Avoid sources of ignition, spark, flame, Store at temperatures below 35 °C or 95°F

SECTION 8 EXPOSURE CONTROLS/ PERSONAL PROTECTION

Individual Protective Measures: Large Spills: Class B PPE
Special Protective Measures: Remove all sources of ignition

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Gel
Melting Point/ Freezing point: Not Determined
Boiling Point: Not Determined

Solubility in Water Soluble pH 4-6.9

Vapor Pressure: Not Determined

Density @ 20 0C <1.0g/ml

Flash Point $> \text{or} = 23 \, ^{0}\text{C} \text{ or } 73.4 \, ^{0}\text{F}$

Self-Ignition Temperature: Not Determined Evaporation Rate Not Determined

SECTION 10.	STABILITY AND REACTIVITY
Materials for Packaging or Bottling:	Stable
Hazardous Reactions with:	Strong oxidizers and strong inorganic acids
Hazardous Decomposition Products:	Carbon Dioxide and carbon monoxide
	Monoxide from burning.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Effects: None known with normal use.

Irritation Data Skin: No report

Irritation Data Eyes: None known with normal use.
Other Stinging, redness, and irritation.

SECTION 12 ECOLOGICAL INFORMATION

General Advice: None

Persistence/ Degradability: Not Determined Behavior in Water Treatment Plants: Not Determined

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of according to local, state, and federal regulations Incinerate in an approved center.

SECTION 14 TRANSPORT INFORMATION

Product Classified as hazardous for transportation: YES X No

DOT (49 CFR) INFORMATION:

DOT Shipping Name: Ethyl Alcohol Solutions

DOT Hazard Class (es) 3

Product Identification UN 1987

Packing Group III

SECTION 15. REGULATORY INFORMATION

EC Classification and Labeling: Not Applicable. **Symbol**: Not Determined.

Risk Phrase: (per Label) Flammable, keep away from flames

Safety Advice: (per label) When using this product keep away from eyes.

Stop using this product: If skin irritation and redness develop. If condition persists for more than 72 hours, consult a physician.

For external use only

Keep this out of children. If swallowed, seek for assistance or

contact Poison Control Center immediately.

SECTION 16: OTHER INFORMATION

National Fire Protection Association (NFPA) Ratings (estimated): This information is intended solely for the use of individuals trained in the NFPA system.

Health: 2

Flammability: 3 Reactivity: 0

DISCLAIMER: This SDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Brands International Corporation to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. Brands assumed no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.



SAFETY DATA SHEET

Issue Date 05-Apr-2021 **Revision Date** 08-Feb-2023 **Version** 1.3 **Page** 1 / 12

1. IDENTIFICATION

Product identifier

Product Name Glass Beads

Other means of identification

Product Code(s) 259600

Safety data sheet number M01529

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory reagent. Uses advised against Consumer use.

Restrictions on use For Laboratory Use Only.

Details of the supplier of the safety data sheet

Manufacturer Address

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word

None

Hazard statements

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

EN / AGHS Page 1/12

Product Code(s) 259600 Issue Date 05-Apr-2021

Version 1.3

Product Name Glass Beads Revision Date 08-Feb-2023

Page 2/12

Chemical NameGlass WoolChemical FamilyInorganic Oxides.CAS No65997-17-3Chemical naturesynthetic fiber.

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No	Percent Range	HMRIC #
Glass, oxide, chemicals	65997-17-3	100%	= 0

4. FIRST AID MEASURES

Description of first aid measures

General advice No hazards which require special first aid measures. Use first aid treatment according to the

nature of the injury.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11 for additional Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

No information available.

Hazardous combustion products This material will not burn.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

U.S. Notice Only persons properly qualified to respond to an emergency involving hazardous

substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should

respond to a spill involving chemicals.

EN / AGHS Page 2/12

Product Name Glass Beads Revision Date 08-Feb-2023

Page 3 / 12

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Glass, oxide, chemicals	TWA: 1 fiber/cm3 respirable	NDF	NDF
CAS#: 65997-17-3	fibers: length >5 µm, aspect		
	ratio >=3:1, as determined by		
	the membrane filter method at		
	400-450X magnification [4-mm		
	objective], using		
	phase-contrast illumination		
	TWA: 5 mg/m ³ inhalable		
	particulate matter		

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

exceeded or irritation is experienced, ventilation and evacuation may be required.

Hand Protection Wear suitable gloves.

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

Skin and body protectionNo special protective equipment required.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not allow

into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Odorless

Physical state

Odor

Solid

Appearance fibers

Color white

Odor threshold Not applicable

Property Values Remarks • Method

Molecular weight No data available

pH No data available

Melting point / freezing point 815 °C / 1499 °F

Initial boiling point and boiling range > 1000 °C / 1832 °F

Evaporation rate Not applicable

Vapor pressure Not applicable

Relative vapor density No data available

Specific Gravity 2.54

Partition coefficient No data available

Soil Organic Carbon-Water Partition

Coefficient

No data available

Autoignition temperature No data available

Decomposition temperatureNo data available

Dynamic viscosity Not applicable

Kinematic viscosity Not applicable

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Insoluble	< 0.1 mg/L	25 °C / 77 °F

Solubility in other solvents

Chemical Name	Chemical Name Solubility classification		Solubility Temperature	
None reported	No information available	No data available	No information available	

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Other information

Metal Corrosivity

Steel Corrosion RateNot applicableAluminum Corrosion RateNot applicable

Volatile Organic Compounds (VOC) Content

This Product is by Weight 100% an Individual Pure Chemical Substance

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Glass, oxide, chemicals	65997-17-3	Not applicable	-

Explosive properties

Upper explosion limitNot applicableLower explosion limitNot applicable

Flammable properties

Flash point Not applicable

Flammability Limit in Air

Upper flammability limit:No data availableLower flammability limit:No data available

Oxidizing properties No data available.

Bulk density

No data available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

metal oxides.

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11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation No known effect based on information supplied.

Eye contact No known effect based on information supplied.

Skin contact No known effect based on information supplied.

Ingestion No known effect based on information supplied.

Symptoms No information available.

Acute toxicity

Based on available data, the classification criteria are not met

Mixture

If available, see ingredient data below.

Ingredient Acute Toxicity Data

No data available.

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Acute Toxicity Estimations (ATE)

Not applicable

	WE -
ATEmix (oral) No information available	
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Skin corrosion/irritation

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

Mixture

If available, see ingredient data below.

Ingredient Skin Corrosion/Irritation Data

No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Glass, oxide, chemicals (100%) CAS#: 65997-17-3	OECD Test 404: Acute Dermal Corrosion/Irritation	Rabbit	500 mg	24 hours	Not corrosive or irritating to skin	ECHA

Serious eye damage/irritation

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

Mixture

If available, see ingredient data below.

Ingredient Eye Damage/Eye Irritation Data

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No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Glass, oxide, chemicals (100%) CAS#: 65997-17-3	OECD Test 405: Acute Eye Corrosion/Irritation	Rabbit	100 mg	72 hours	Not corrosive or irritating to eyes	ECHA

Respiratory or skin sensitization

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

Mixture

If available, see ingredient data below.

Ingredient Sensitization Data

No data available.

Chemical name	Test method	Species	Results	Key literature references and sources for data
Glass, oxide, chemicals (100%) CAS#: 65997-17-3	OECD Test No. 406: Skin Sensitization	Guinea pig	Not confirmed to be a skin sensitizer	ECHA

STOT - single exposure

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

Mixture

If available, see ingredient data below.

Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

STOT - repeated exposure

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

Mixture

If available, see ingredient data below.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

Carcinogenicity

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

Mixture

If available, see ingredient data below.

Ingredient Carcinogenicity Data

No data available.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Glass, oxide, chemicals	65997-17-3	2 %	Group 3	-	

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Group 3 - Not classifiable as a human
	carcinogen
NTP (National Toxicology Program)	Does not apply
OSHA	Does not apply

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Germ cell mutagenicity

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

Mixture invitro Data

If available, see ingredient data below.

Substance invitro Data

No data available.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Glass, oxide, chemicals (100%) CAS#: 65997-17-3	Mammalian gene cell mutation	Hamster ovary	0.001 mmol/L	None reported	Positive test result for mutagenicity	ECHA

Mixture invivo Data

If available, see ingredient data below.

Substance invivo Data

No data available.

Reproductive toxicity

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

Mixture

No data available.

Ingredient Reproductive Toxicity Data

No data available.

Aspiration hazard

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

12. ECOLOGICAL INFORMATION

Ecotoxicity Based on available data, the classification criteria are not met.

Unknown aquatic toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

Mixture

Aquatic Acute Toxicity

If available, see ingredient data below.

Aquatic Chronic Toxicity

If available, see ingredient data below.

Substance

Aquatic Acute Toxicity

No data available.

Aquatic Chronic Toxicity

No data available.

Persistence and degradability

Mixture

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No data available.

Mixture

No data available.

Partition coefficient No data available

Mobility

Soil Organic Carbon-Water Partition Coefficient No data available

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

US EPA Waste Number Not applicable

Special instructions for disposal

Place material in a plastic bag. Mark bag 'Non-hazardous trash', and dispose of as normal

refuse.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG Not regulated

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods.

If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories

TSCA Complies DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

EINECS/ELINCS Complies
ENCS Does not comply
IECSC Complies

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KECL - Existing substances Complies Complies PICCS Complies **TCSI AICS** Complies Complies **NZIoC**

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Glass, oxide, chemicals (CAS #: 65997-17-3)	Carcinogen

WARNING: This product can expose you to chemicals including Glass, oxide, chemicals, which is known to the State of California to cause cancer.

For more information, go to http://www.P65Warnings.ca.gov

IMERC: Not applicable

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations.

U.S. EPA Label Information

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16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments

None

Additional information

Global Automotive Declarable Substance List (GADSL)

Not applicable

NFPA and HMIS Classifications

NFPA	Health hazards - 0	Flammability - 0	Instability - 0	Physical and chemical
		52°	35 ²	properties -
HMIS	Health hazards - 0	Flammability - 0	Physical hazards - 0	Personal protection -
		3,000		X
				-1

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)
ATSDR ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS (Chemical Carcinogenesis Research Information System)

CDC (Center for Disease Control)

CEPA CEPA (Canadian Environmental Protection Agency)

CICAD CICAD (Concise International Chemical Assessment Documents)

ECHA (The European Chemicals Agency)
EEA EEA (European Environment Agency)
EPA EPA (Environmental Protection Agency)

ERMA (New Zealands Environmental Risk Management Authority)

ECOSARS Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

FDA (Food & Drug Administration)

GESTIS GESTIS (Information System on Hazardous Substances of the German Social Accident

Insurance)

HSDB (Hazardous Substances Data Bank)

INERIS INERIS (The National Industrial Environment and Risks Institute)
IPCS INCHEM IPCS INCHEM (International Programme on Chemical Safety)
IUCLID IUCLID (The International Uniform Chemical Information Database)
NITE Japan National Institute of Technology and Evaluation (NITE)

NIH NIH (National Institutes of Health)

NIOSH NIOSH (National Institute for Occupational Safety and Health)
LOLI (List of Lists - An International Chemical Regulatory Database)

NDF no data

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH IDLH Immediately Dangerous to Life or Health

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEEN (Pan European Ecological Network)

RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS (Screening Information Dataset) for High Volume Chemicals

SYKE The Finnish Environment Institute (SYKE)
USDA USDA (United States Department of Agriculture)
USDC USDC (United States Department of Commerce)

WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those listed

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in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.

SKN* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization ** Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

Issue Date 05-Apr-2021

Revision Date 08-Feb-2023

Revision Note SDS sections updated

2

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

HACH COMPANY@2022

End of Safety Data Sheet

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SAFETY DATA SHEET

1. Identification

10000000075 Product number

GLASS CLEANER Product identifier

Revision date 05-30-2015 Sprayway, Inc. Company information

1005 S. Westgate Drive

Addison, IL 60101 United States

General Assistance 1-630-628-3000 Company phone

1-866-836-8855 Emergency telephone US 1-952-852-4646 Emergency telephone outside

US

02 Version #

05-26-2015 Supersedes date cleaner Recommended use None known. Recommended restrictions

2. Hazard(s) identification

Gases under pressure Physical hazards

Not classified. Health hazards Not classified. **Environmental hazards** OSHA defined hazards Not classified.

Label elements

Warning Signal word

Contains gas under pressure; may explode if heated. Hazard statement

Precautionary statement

Observe good industrial hygiene practices. Prevention

Wash hands after handling. Response

Protect from sunlight. Store in a well-ventilated place. Storage

Dispose of waste and residues in accordance with local authority requirements. Disposal

Liquefied gas

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-Butoxyethanol		111-76-2	2.5 - 10
Ethyl Alcohol		64-17-5	2.5 - 10
Butane		106-97-8	1 - 2.5
Propane		74-98-6	1 - 2.5
Other components below reportable levels	3		90 - 100

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

Product name: GLASS CLEANER

SDS US

4. First-aid measures

Inhalation

Move to fresh air. Get medical attention if symptoms persist.

Skin contact

Get medical attention if irritation develops and persists.

Eye contact

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.

Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth.

Most important

symptoms/effects, acute and

delayed

Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Contents under pressure. During fire, gases hazardous to health may be formed.

Specific hazards arising from the chemical

Special protective equipment

and precautions for firefighters

Fire-fighting equipment/instructions Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. 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 General fire hazards Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. 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. See Section 8 of the SDS for Personal Protective Equipment. For personal protection, see section 8 of the

Methods and materials for containment and cleaning up Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). 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. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. 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 discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

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. Ground and bond containers when transferring material. Do not re-use empty containers. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Product name: GLASS CLEANER

Level 1 Aerosol.

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. Keep containers tightly closed in a dry, cool and well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-	1 1 imits for A	ir Contaminants	(29 CER 1910 1000)
US. USHA TABle Z-	I Limits for A	ir Containmants	129 CFK 1910.10001

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	PEL	240 mg/m3	
,		50 ppm	
Ethyl Alcohol (CAS 64-17-5)	PEL	1900 mg/m3	
		1000 ppm	
Propane (CAS 74-98-6)	PEL	1800 mg/m3	
		1000 ppm	
US. ACGIH Threshold Limit Values			
Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm	
Butane (CAS 106-97-8)	STEL	1000 ppm	
Ethyl Alcohol (CAS 64-17-5)	STEL	1000 ppm	
US. NIOSH: Pocket Guide to Chem	ical Hazards		
Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	TWA	24 mg/m3	
·		5 ppm	
Butane (CAS 106-97-8)	TWA	1900 mg/m3	
		800 ppm	
Ethyl Alcohol (CAS 64-17-5)	TWA	1900 mg/m3	
		1000 ppm	
Propane (CAS 74-98-6)	TWA	1800 mg/m3	
		1000 ppm	

Biological limit values

ACGIH Biological Exposure Indices							
Components	Value	Determinant	Specimen	Sampling Time			
2-Butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*			

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

Exposure guidelines

US - California OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

2-Butoxyethanol (CAS 111-76-2) Skin designation applies.

US - Tennesse OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

2-Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

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

2-Butoxyethanol (CAS 111-76-2) 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.

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Individual protection measures, such as personal protective equipment

If contact is likely, safety glasses with side shields are recommended. Eye/face protection

Hand protection

For prolonged or repeated skin contact use suitable protective gloves.

Skin protection

Other Wear suitable protective clothing.

If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an Respiratory protection

air-supplied respirator. 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.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

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

Clear. Appearance

> Gas. Physical state

Form Aerosol, Liquefied gas.

Light yellow. Color Characteristic. Odor

Not available. Odor threshold

9.1 - 10.1 estimated рΗ Not available.

Melting point/freezing point

Initial boiling point and boiling

212 °F (100 °C) estimated

range

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

Not available.

Evaporation rate Not available. Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

Flammability limit - upper

(%)

Not available. Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Vapor pressure

80 - 100 psig @70F estimated

Not available. Vapor density Not available. Relative density

Solubility(ies)

Not available. Solubility (water) Not available. Partition coefficient

(n-octanol/water)

Not available. Auto-ignition temperature Not available. Decomposition temperature

Other information

Viscosity

Aerosol spray enclosed space

> 2.52 g/cm3 Tested **Deflagration density**

Aerosol spray ignition

distance

< 15 cm Tested estimated

0.977 - 0.997Specific gravity

Product name: GLASS CLEANER

Not available.

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. Hazardous polymerization does not

occur.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. 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

Ingestion Expected to be a low ingestion hazard.

Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

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.

Information on toxicological effects

Acute toxicity May be harmful if swallowed. May be harmful in contact with skin. May be harmful if inhaled.

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

Expected to be a low hazard for usual industrial or commercial handling by trained p		
Components	Species	Test Results
2-Butoxyethanol (CAS 111-7	⁷ 6-2)	
Acute		
Dermal		No
LD50	Guinea pig	230 ml/kg, 24 Hours
		7.3 ml/kg, 4 Days
	Rabbit	450 ml/kg, 24 Hours
		435 mg/kg, 24 Hours
		0.63 ml/kg
	Rat	> 2000 mg/kg, 24 Hours
Inhalation		
LC50	Rabbit	400 ppm, 7 Hours
	Rat	450 ppm, 4 Hours
Oral		
LD100	Rabbit	695 mg/kg
LD50	Dog	> 695 mg/kg
	Guinea pig	1200 mg/kg
	Rat	530 - 2800 mg/kg
Butane (CAS 106-97-8)		
Acute		
Inhalation		
LC50	Mouse	1237 mg/l, 120 Minutes
		52 %, 120 Minutes

Product name: GLASS CLEANER

Rat

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1355 mg/l

Components	Species	Test Results
Ethyl Alcohol (CAS 64-17-5)		
Acute		
Inhalation		
LC50	Cat	85.41 mg/l, 4.5 Hours
		43.68 mg/l, 6 Hours
	Mouse	> 60000 ppm
		79.43 mg/l, 134 Minutes
	Rat	> 115.9 mg/l, 4 Hours
		51.3 mg/l, 6 Hours
Oral		
LD50	Monkey	6000 mg/kg
	Mouse	10500 ml/kg
	Rat	1187 - 2769 mg/kg
		7800 ml/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
 Estimates for product n 	nay be based on additional component	data not shown.

Skin corrosion/irritation

May be irritating to the skin. Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation. May be irritating to eyes.

Respiratory or skin sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

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

IARC Monographs. Overall Evaluation of Carcinogenicity

2-Butoxyethanol (CAS 111-76-2)

3 Not classifiable as to carcinogenicity to humans.

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 -

Not classified.

repeated exposure

Aspiration hazard

Not an aspiration hazard. Not likely, due to the form of the product.

Prolonged inhalation may be harmful. May be harmful if absorbed through skin. Chronic effects

> 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

12. Ecological information

Ecotoxicity

Harmful to aquatic life.

Product name: GLASS CLEANER

Product		Species	Test Results
GLASS CLEANER (CA	S Mixture)		
Aquatic			
Crustacea	EC50	Daphnia	13838.1602 mg/l, 48 hours estimated
Components		Species	Test Results
2-Butoxyethanol (CAS	111-76-2)		
Aquatic			
Fish	LC50	Inland silverside (Menidia beryllina)	1250 mg/l, 96 hours
Ethyl Alcohol (CAS 64-	17-5)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	7700 - 11200 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promela	s) > 100.1 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

No data available.

Partition coefficient n-octanol / water (log Kow)

0.83 2-Butoxyethanol 2.89 Butane -0.31 Ethyl Alcohol 2.36 Propane

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

Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. 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

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

14. Transport information

DOT

UN number

UN1950 Aerosols

UN proper shipping name

Transport hazard class(es)

Class

2.2

Subsidiary risk

Label(s)

2.2

Packing group

Not applicable.

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

Packaging exceptions

306

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, non-flammable

Product name: GLASS CLEANER

Transport hazard class(es)

2.2 Class Subsidiary risk 2.2 Label(s)

Not applicable. Packing group

Environmental hazards No. **ERG Code**

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

Other information

Passenger and cargo

aircraft

Allowed.

Cargo aircraft only **Packaging Exceptions**

Allowed. LTD QTY

IMDG

UN1950 **UN** number UN proper shipping name

AEROSOLS

Transport hazard class(es) Class

2.2

Subsidiary risk Label(s)

2.2

Packing group

Not applicable.

Environmental hazards

No. Marine pollutant

EmS

Not available.

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

Packaging Exceptions Transport in bulk according to LTD QTY Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

DOT



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.

All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Product name: GLASS CLEANER

Product #: 1000000075 Version #: 02 Revision date: 05-30-2015 Issue date: 05-26-2015

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

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

Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

2-Butoxyethanol (CAS 111-76-2) Butane (CAS 106-97-8) Ethyl Alcohol (CAS 64-17-5)

Propane (CAS 74-98-6)

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

2-Butoxyethanol (CAS 111-76-2)

Butane (CAS 106-97-8) Ethyl Alcohol (CAS 64-17-5) Propane (CAS 74-98-6)

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

2-Butoxyethanol (CAS 111-76-2)

Butane (CAS 106-97-8) Ethyl Alcohol (CAS 64-17-5) 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 Australian Inventory of Chemical Substances (AICS)	On inventory (yes/no)* Yes
Australia		Yes
Canada	Domestic Substances List (DSL)	
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)	Yes
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

Product name: GLASS CLEANER
Product #: 1000000075 Version #: 02 Revision date: 05-30-2015 Issue date: 05-26-2015

Country(s) or region Inventory name On inventory (yes/no)*

New Zealand New Zealand Inventory No.

Philippines Philippine Inventory of Chemicals and Chemical Substances No

(PICCS)

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
 05-26-2015

 Revision date
 05-30-2015

Version # 02

References EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

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: Alternate Trade Names

Product name: GLASS CLEANER

Product #: 1000000075 Version #: 02 Revision date: 05-30-2015 Issue date: 05-26-2015



MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

Product Line	Sulyn
Product Name Glitter, Fairy Sparkles, Fairy Dust	
Synonyms, Trade Name, Chemical	48 Gauge Metallized & Color Lacquered Polyester, Metallized Mylar or
Name	Metallic Tissue, Polyethylene Terephthalate Film, Aluminum Metallized
	& Color Coated with Acrylic Coating
Company Identification	Advantus Corp.
	12276 San Jose Blvd
	Ste. 618
	Jacksonville, FL 32223 USA
Company Phone	Advantus Office (904) 482-0091
Emergency Phone	Advantus Office (904) 482-0091
Transportation Phone	CHEMTREC (800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

Color	Various
Physical Form	Solid
Odor	Odorless
Major Health Hazards	No significant target effects reported.
Inhalation	None.
Skin Contact	None.
Eye Contact	None.
Ingestion	None.
Carcinogen Status, OSHA	No.
Carcinogen Status, NTP	No.
Carcinogen Status, IARC	No.

SECTION 3: COMPOSITION & INFORMATION ON INGREDIENTS

Ingredient	CAS No.	% by Weight	Note
Polyethylene Terephthalate	25036-59-9	89.5%	
Carbon Black	1333-86-4		TLV: 3.5mg/m2
Aluminum		0.0%	
Acrylic Resin*	Proprietary	9%	
Pigment**	Proprietary	0.0%	

Additional Notes (if any): * Industrial Coating Resin --Not a Hazardous Material as defined in 29CFR1915-2

SECTION 4: FIRST AID MEASURES

Inhalation	It is unlikely that emergency treatment will be required. Remove from
	exposure. Remove victim to fresh air. If cough or other respiratory
	symptoms develop, consult medical personnel.
Eye Contact	It is unlikely that emergency treatment will be required. Wash with
	large amounts of water or normal saline until no evidence of chemical
	remains (at least 15-20 minutes). After initial flushing, remove any
	contact lenses and continue flushing for at least 15 minutes. If
	redness, itching or a burning sensation develops, have eyes examined
	and treated by medical personnel.
Skin Contact	It is unlikely that emergency treatment will be required. If adverse
	effects occur, wash with soap or mild detergent and large amounts of
	water. Get medical attention, if needed.
Ingestion	Give one or two glasses of water to drink. If gastrointestinal
	symptoms develop, consult medical personnel. (Never give anything
	by mouth to an unconscious person.)

SECTION 5: FIRE FIGHTING MEASURES

Film remaining in contact with flame will ignite and continue to burn slowly, dropping flaming liquid which can spread the fire. If the flame source is stationary, the film will shrink away and self extinguish.

^{**} No Heavy Metals as defined in CONEG LEGISLATION

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled: Sweep up and recover or shovel into waste container.

Disposal method: Discarded product is not a hazardous waste under RCRA, 40 CRF 261. Container disposal:

Puncture or otherwise destroy packaging material before disposal

SECTION 7: HANDLING & STORAGE

Handling	Avoid contact with skin and eye. Do not smoke, eat and drink at the	
	work-place.	
Storage	See original container for storage recommendations.	

SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Limits	No occupational exposure limits established.
Ventilation	Based on available information, additional ventilation is not required
	under normal conditions. Remove decomposition fumes with local
	exhaust if overheating occurs during processing above 300 degrees C.
Eye Protection	Eye protection not required under normal conditions.
Skin Protection	Skin protection not required under normal conditions.
Gloves	Protective gloves are not required under normal conditions.
Respirator	No respirator is required under normal conditions of use. If needed,
	use MSHA-NIOSH approved respirator for dust, mists and fumes
	whose TLV is greater than 0.05 mg/m3.
Clothing	Protective clothing is not required under normal conditions.
Other Exposure Notes	

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Physical Form	Not available.	
Color	Not available.	
Odor	Not available.	
Boiling Point	Not available.	
Flash Point	Not available.	
Vapour Pressure	Not available.	
Specific Gravity	Not available.	
Viscosity	Not available.	
Solubility in Water	Not available.	
Percent VOC	Not available.	
Ph	Not available.	
Pour Point	Not available.	
Volatility	Not available.	
Odor Threshold	Not available.	
Evaporation Rate	Not available.	
Other Properties Notes		

SECTION 10: STABILITY & REACTIVITY

Stability/Reactivity	Stable at normal temperatures and pressure.
Conditions to Avoid	None reported.
Incompatibilities	No data available.
Hazardous Decomposition	None known.
Hazardous Polymerization	Will not occur.
Other Stability/Reactivity Notes	Combustion products: Combustion Products: Carbon Dioxide, Carbon
	Monoxide, Terephtbalic Acid,
	Aldehydes.

SECTION 11: TOXICOLOGICAL INFORMATION

Not available.

SECTION 12: ECOLOGICAL INFORMATION

Not available.

SECTION 13: DISPOSAL INFORMATION

Dispose in accordance with all applicable regulations.

SECTION 14: TRANSPORT INFORMATION

No classification assigned.

SECTION 15: REGULATORY INFORMATION

Not regulated.

SECTION 16: OTHER INFORMATION

The information provided herein is compiled from internal reports and data from professional publication. It is furnished without warranty of any kind, expressed or implied. It is intended solely to assist in evaluating suitability and proper use of the material and in implementing safety precautions and procedures. Employers should use this information as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials. All information used must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

Last Modified: 1-25-2011

MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Description: Glitter/Glitter Flake

Product Type: Decorative Polymeric Polyethylene Terephthalate Based Plastic

2. Manufacturer/Supplier Information

School Specialty, Inc. W6316 Design Drive

Greenville, WI 54924

School Specialty Phone: 888-388-3224

National Poison Control Center: 800-222-1222

3. Composition, Information On Ingredients:

The product conforms to ASTM D-4236 standards (the standard practice for labeling art materials for acute and chronic adverse health hazards)

CAS Number: Not Assigned EC Number: Not Assigned

Percentage: 100%

4. Emergency Overview:

Appearance: Multicolored Solid Flakes

Odor: None

Not a significant fire hazard

5. Hazards

INGESTION: Not harmful under normal conditions of use.

INHALATION: Not harmful under normal conditions of use. However,

airborne particles may cause nose, throat, and lung irritation SKIN: May cause irritation on prolonged or repeated contact. EYES: May cause irritation on prolonged or repeated contact.

First aid measures

INGESTION: If accidentally swallowed contact poison control center, or

hospital emergency room for treatment procedures.

INHALATION: Remove to fresh air.

SKIN: Rinse with water.

EYES: Flush with large amounts of water

6. Fire Fighting Measures

Auto-ignition temperature:

Upper/lower flammable limits;

Upper/lower Explosive limits:

Not applicable
Not applicable
Not applicable
Not applicable

Melting Point: >300°C.

Extinguishing media: Water, dry powder, foam, carbon dioxide.

Accidental Release Measures:

Sweep (scoop) up and remove to a chemical disposal area. Avoid entry into natural bodies of water.

7. Handling and Storage

Handling

Handle in accordance with good industrial hygiene and safety practices.

INHALATION: Avoid prolonged or repeated breathing of dust.

SKIN: Avoid prolonged contact with skin.

EYES: Avoid prolonged or repeated contact with eyes

Storage:

Store in a cool, dry place in closed container.

8. Exposure Controls/Personal Protection

Exposure Controls

If airborne contaminants (dust) are generated, provide sufficient ventilation to keep contaminant levels below acceptable limits.

Personal Protection

Where air contamination can exceed acceptable limits, appropriate equipment, such as goggles or face masks, should be worn.

9. Physical and Chemical Properties

Percent volatiles	<1%
PH	Not applicable
Specific Gravity	Not applicable
Appearance	Glossy solid
Auto-ignition temperature	Not applicable
Boiling Point	Not applicable
Vapor Density	Not applicable
Vapor Pressure	Not applicable
Flammable Limits	Not applicable
Flash Point	Not applicable
Freezing Point	Not applicable
Odor	None
Solubility in Water	Insoluble

10. Stability and Reactivity

Stable

Toxicological Information

Not available

p.2 Glitter/Glitter Flakes

Ecological Information

Not available

Incompatibilities

Oxidizers

Decomposition Products

Carbon Monoxide, Carbon Dioxide

Hazardous Polymerization

Will not occur

Other Hazards:

None known

Disposals .

Dispose in accordance with all applicable federal and local regulations.

11. Other Information

Product conforms to ASTM D-4236.

MATERIAL SAFETY DATA SHEET

PRODUCT CODE: LG Series (1) Product: Lead Free Gloss Glazes

Manufacturer's Name:

American Art Clay CO., Inc.

Address:

6060 Guion Road Indianapolis, IN 46254

Information Number:

(800) 374-1600

Emergency Number: (800) 374-1600

Vapor Pressure

Mm Hg @ Temp

Section 1- Product Identification

Product Name: Gloss Glazes

Product Class: Ceramic Glazes

Product Size: 16 oz., 1 lb., gal

Weight

Percent

LG. 1, 10, 11, 14, 20, 21, 23, 24, 30, 34, 36, 40, 42, 48, 50, 51, 52, 54, 55, 57, 58, 59, 60, 61, 62, 63, 65, 67, 68, 760, LF 100, DC 10, TL-1, DW-11, Bennett Clear & Brickyard Clear Gloss Glaze

Section II - Hazardous Ingredients

CAS# Reportable Components 7732-18-5 Water 65997-18-4 Sod. Borosilicate Frit 1332-58-7 Clay Mixture Inorganic Stains 9004-32-4 Gum

No reportable quantities of hazardous ingredients are present.

No hazardous ingredients. Carries the "AP" Seal. Labeling conforms to ASTM D4236.

Section III - Physical / Chemical Characteristics

Boiling Range: N/A

Vapor Density: Heavier than air.

Coating V.O.C.: N/A

Appearance and Odor: Liquid / Dry

Specific Gravity (H20=1): Less than 2

Evaporation Rate: N/A Material V.O.C.: N/A

Section IV - Fire and Explosion Hazards Data

Flash Point: N/A

Flammable limits In Air by Volume: NA - Lower

Extinguishing Media: N/A

Unusual Fire and Explosion Hazards: None.

NA - Upper:

Method Used: N/A

Conditions to Avoid: None

Special Firefighting Procedures: No fire hazards.

Section V- Reactivity Data

Stability: Stable Incompatibility (Materials to Avoid): None

Hazardous Decomposition or Byproducts: Will not occur.

Hazardous Polymerization: Will not occur.

Section VI - Health Hazard Data

Inhalation Health Risks and Symptoms of Exposure: None.

Page 2 LG Series (1)

Skin and Eye Contact Health Risks and Symptoms of Exposure: Rinse eyes thoroughly with water for 15 minutes. If irritation persists contact physician. Skin - wash hands with soap and water.

Skin Absorption Health Risks and Symptoms of Exposure: None.

Ingestion Health Risks and Symptoms of Exposure: No hazardous ingredients.

Health Hazards (Acute / Chronic): No hazardous ingredients.

Carcinogenicity: N- NTP Carcinogen

N - IARC Monographs

N - OSHA Regulated

Medical Conditions Generally Aggravated by Exposure: Unknown.

Emergency and First Aid Procedures: Contact your local poison control for further health information.

Section VII - Precautions For Safe Handling and Use

Steps to be taken in case material released or spilled: Specific steps not necessary.

Waste Disposal Method: Dispose of paper towel in trash and rinse sponge. In manufacturing, dispose of in accordance to Local, State and Federal regulations.

Precautions to be taken in handling and storing. Always keep lid tightly on jar of moist product while not in use or storage. Uncovered product will dry out.

Other precautions: None.

Section VIII - Control Measures

Respiratory Protection: When spraying or mixing dry glaze use NIOSH certified mask for dust or mist. Not needed for brush, sponge or dipping application.

Ventilation: Not needed for brush application. If spraying glazes use spray booth.

Protective Gloves: Not needed.

Eye Protection: Not needed.

Other Protective Clothing or Equipment: Not needed.

Work /Hygienic Practices: Refer to AMACO Product Encyclopedia & Safety Manual. Manual available upon request.

Section IX - Disclaimer

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control we make no warranties, expressed or implied, except those that may be contained in our written acknowledgement.

Prepared By: L. Jenkins

2005

MATERIAL SAFETY DATA SHEET

Product: Lead / Cadmium Gloss Glazes Product Code: LG Series (4)

American Art Clay Co., Inc. Manufacturer's Name:

> 6060 Guion Road Indianapolis, IN 46254

Information Number: (800) 374-1600 Emergency Number: (800) 374-1600

Section I - Product Identification

Product Name: Gloss Glazes Product Class: Ceramic Glazes Product Size: 16 oz.

LG 53, 56 & 66

Section II - Hazardous Ingredients

Reportable Components CAS# Vapor Pressure Weight Mm Hg @ Temp Percent

Ceramic Frit 65997-18-4 49.67

Lead Compd. - ACGIH TLV .05mg/M3, OSHA PEL .05mg/M3 @ PB Cadmium Compd. - ACGIH TLV 10 ug/M3, OSHA PEL 5 ug/M3 @ CD

Water 7732-18-5 Clay 1332-58-7

Flint 14808-60-7 Gum 9004-32-4

Carries the "HL/CL" Seal. Labeling conforms to ASTM D4236. Contains lead borosilicate frit and cadmium pigment. NOT FOR USE IN HOME OR HOME STUDIO. Tableware producers are responsible in complying with FDA guidelines for lead release for tableware.

* Indicates toxic chemical(s) subject to reporting of Section 313 of Title III and of 40 CFR 372 are present.

Section III - Physical / Chemical Characteristics

Boiling Range: NA

Vapor Density: Heavier than air.

Coating V.O.C.: NA

Appearance and Odor: Liquid

Specific Gravity (H20=1): Less than 2.

Evaporation Rate: NA Material V.O.C.: NA

Section IV - Fire and Explosion Hazard Data

Flash Point; NA

Flammable Limits In Air by Volume: NA - Lower

Extinguishing Media: NA

Special Firefighting Procedures: No fire hazard. Unusual Fire and Explosion Hazards: No fire hazard. Method Used: NA

NA - Upper

Section V - Reactivity Data

Conditions to Avoid: None

Stability: Stable

Incompatibility (Materials to Avoid): None.

Hazardous Decomposition or Byproducts: Will not occur.

Hazardous Polymerization: Will not occur.

Section VI - Health Hazard Data

Inhalation Health Risks and Symptoms of Exposure: May cause damage to the lungs by inhalation of dust or mist. Cancer agent based on laboratory tests. Not for spray application. Refer to Health Hazard Data for further information.

Skin and Eye Contact Health Risks and Symptoms of Exposure: Eye- rinse eyes thoroughly with water for 15 minutes. If irritation persists contact physician. Skin- wash hands with soap and water after using.

Skin Absorption Health Risks and Symptoms of Exposure: May be harmful if swallowed. Wash hands with soap and water after using.

Ingestion Health Risks and Symptoms of Exposure: May be harmful if swallowed. Cancer agent based on experimental data. May cause damage to the lungs by inhalation of dust or mist. Exposure may cause damage to the testes, difficulty with child bearing or harm to the developing fetus. Exposure may cause nervous system, kidney or bone marrow damage.

Health Hazards (Acute / Chronic): Contains Lead borosilicate frit. See above.

Carcinogenicity: Yes - NTP Carcinogen

Yes - IARC Monographs

N - OSHA Regulated

Medical Conditions generally aggravated By Exposure: Unknown.

Emergency and First Aid Procedures: Contact your local poison control for further health information.

Section VII - Precautions for Safe Handling and Use

Steps To Be Taken In Case Material Release or Spilled: Clean with paper towel and wet sponge. Wash with soap and water, Damp mop after use. Do not create dust. Cleaning should be on a routine basis.

Waste Disposal Method: Dispose of paper towels in trash and rinse sponge. In manufacturing, dispose of in accordance to Local, State or Federal regulations.

Precautions to be taken In Handling and Storing: Wear Apron. Always keep lid tightly on jar of moist product while not in use or storing. Uncovered product will dry out.

Other Precautions: NOT FOR USE BY CHILDREN OR IN HEALTHCARE FACILITIES. DO not eat, drink or smoke while using. Wear apron and wash hands immediately after use. Do not use if pregnant or contemplating pregnancy.

Page 3 LG Series (4)

Section VIII - Control Measures

Respiratory Protection: Not needed for brush or sponge application. Product not for spray application.

Ventilation: Not needed. Protective Gloves: Not needed. Eye Protection: Not needed.

Other Protective Clothing or Equipment: Apron

Work / Hygienic Practices: Refer to AMACO Product Encyclopedia & Safety Manual. Manual available upon request,

Section IX Disclaimer

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Prepared by: L. Jenkins

2005

MATERIAL SAFETY DATA SHEET

PRODUCT: Lead Free Gloss Glaze (Copper)

Product Code: LG Series (2)

Manufacturer's Name:

American Art Clay Co., Inc.

6060 Guion Road Indianapolis, IN 46254

Information Number: (800) 374-1600

(Copper)

Emergency Number: (800) 374-1600

Section I – Product Identification

Product Name: Gloss Glazes

Product Class: Ceramic Glazes

Product Size: 16 oz., 1 lb., gal

LG 2, 25, 26, 27, 44, 45, 46

Section II - Hazardous Ingredients

Reportable Components

CAS#

Vapor Pressure Mm Hg (a) Temp Weight Percent

Copper Carbonate

7492-68-4

Copper: ACGIH TLV 1mg/M3, OSHA PEL 1mg/M3 @ CU

Water

7732-18-5

Sod. Borosilicate Frit Clay

65997-18-4 1332-58-7

Flint

14808-60-7

Carries the "HL/CL" Scal. Labeling conforms to ASTM D4236. Contains Copper. Refer to Section VI.

Section III- Physical / Chemical Characteristics

Boiling Range: NA

Specific Gravity (H20=1): Less than 2

Vapor Density: Heavier than air.

Coating V.O.C.: NA

Evaporation Rate: NA Material V.O.C.: NA

Appearance and Odor: Liquid / Dry

Section IV - Fire and Explosion Hazard Data

Flash Point: NA

Method Used: NA

Flammable Limits In Air By Volume: NA - Lower

NA - Upper

Extinguishing Media: NA

Special Firefighting Procedures: No fire hazard. Unusual Fire and Explosion Hazards: No fire hazard.

Section V - Reactivity Data

Stability: Stable

Conditions to Avoid: None.

Incompatibility (Materials to Avoid): None

Hazardous Decomposition or Byproducts: Will not occur.

Hazardous Polymerization: Will not occur

Section VI - Health Hazard Data

Inhalation Health Risks and Symptoms of Exposure: None.

Page 2 LG Series (2)

Skin and Eye Contact Health Risks and Symptoms of Exposure: Eye rinse eyes thoroughly with water for 15 minutes. If irritation persists contact physician. Skin – wash hands with soap and water after use..

Ingestion Health Risks and Symptoms of Exposure: May be harmful if swallowed. Exposure may cause damage to the kidneys, liver or anemia. If swallowed get prompt medical attention. Health Hazards (Acute / Chronic): Contains soluble copper. See above.

Carcinogenicity: N - NTP Carcinogen

N - IARC Monographs

N - OSHA Regulated

Medical Conditions Generally Aggravated by Exposure: Unknown.

Emergency and First Aid Procedures: Contact your local poison control center for further information,

Section VII - Precautions for Safe Handling

Steps To Be Taken In Case Material is released or spilled: Specific Steps not necessary.

Waste Disposal Method: Dispose of paper towel in trash and rinse sponge. In manufacturing, dispose of in accordance to Local, State & Federal regulations.

Precautions To Be Taken In Handling and Storing: Always keep lid tightly on jar of moist product while not in use or storage. Uncovered product will dry out.

Other Precautions: Not for use by children or in healthcare facilities.

Section VIII - Control Measures

Respiratory Protection: Not needed for brush or sponge application. Product not for spray application.

Ventilation: Not needed.

Protective Gloves: Not needed.

Eye Protection: Not needed.

Other Protective Clothing or Equipment: Not needed.

Work / Hygienic Practices: Refer to AMACO product Encyclopedia & Safety Manual. Manual available upon request.

Section IX - Disclaimer

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control we make no warranties, expressed or implied, except those that may be contained in our written acknowledgement.

Prepared by: L. Jenkins

2005

Chemical Product and Company Information



CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only. Not for drug, food or household use.

GLUCOSE, 0.1% SOLUTION Product

Synonyms

Dextrose, Water Solution

Section 2 Hezards Identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: None required Pictograms: No symbol required Target organs: None known

GHS Classification: None required

GHS Label information: Hazard statement: None required

Precautionary statement: None required

Supplemental information:

Do not breathe vapors, spray or mist. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Chemical Name	CAS#	%	EINECS
Water	7732-18-5	99.65%	231-791-2
Germaben II	Mixture	0.25%	None assigned
Dextrose, anhydrous	50 - 99-7	0.1%	200-075-1
		:	
	:		

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Suitable Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire.

Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Haridling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

sure Controls / Personal Protection Chemical Name ACGIH (TLV) OSHA (PEL) **Exposure Limits:** NIOSH (REL) Dextrose None established None established None established

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9 Physical & Chemical Properties Appearance: Clear, colorless liquid.

Odor: No eder.

Odor threshold: Data not available.

pH: Data not available.

Melting / Freezing point: Approximately 0°C (32°F) (water) Boiling point: Approximately 100°C (212°F) (water)

Flash point: Data not available

Evaporation rate (Water = 1): <1

Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available

Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water)

Relative density (Specific gravity): Approximately 1.0 (water)

Solubility(ies): Complete in water.

Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available.

Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture

Section 10 Stability & Reactivity (

Chemical stability: Stable

Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures which cause evaporation.

Incompatible materials: Strong oxidizers.

Hazardous decomposition products: Carbon oxides.

Sacion Lacary, Mousticrical inform

Acute toxicity: Data not available Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available

Aspiration hazard: Data not available

Potential health effects:

Inhalation: Inhalation may cause respiratory irritation. Ingestion: Not expected to be a health hazard. Skin: Not expected to be a health hazard.

Eyes: Contact with eyes may cause transient irritation.

Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards...

Additional information: RTECS #: Data not available

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Exceptions: Not applicable

Reportable Quantity: No 2012 ERG Guide # Not applicable

Marine pollutant: No

A chemical is considered to be listed if the CAS number to

The distribution of the distribution of the liveritory list.						
Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Dextrose	Listed	Not listed	Not listed	Listed	Not listed	Uncontrolled product

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

> Revision Date: March 20, 2014 Supercedes: March 20, 2014

Confirms to OSHA Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012

GOO GONE

Product: Goo Gone- 2028, 2030, 2030A, 2050, 2053, 2082, 2086, 2087, 2089, 2090, 2092,

2035CLIP, 2095CLIP, 2129, 2139B, 2166D, 2221D, 2223

Revision Date: 12-Jun-2018

SECTION 1 – IDENTIFICATION

Product Identifier

Product Name: Goo Gone

Product Code: 2028, 2030, 2030A, 2050, 2053, 2082, 2086, 2087, 2089, 2090, 2092, 2035CLIP,

2095CLIP, 2129, 2139B, 2166D, 2221D, 2223

Recommended Use of the Chemical and Restrictions for Use

Recommended Use: Cleaner

Restrictions for Use: Use only as directed.

Details of the Supplier

Manufacturer: Goo Gone

755 Tri-State Parkway Gurnee, IL 60031 855-364-8135

Emergency Phone Number

24-Hour Number: 1-800-535-5053 **International:** 1-352-323-3500

SECTION 2 – HAZARDS IDENTIFICATION

Classification

Hazard Class	Category
Flammable Liquid	4
Skin Sensitization	1
Aspiration Hazard	1

Label Elements

Hazard Symbols(s):





Signal Word(s): Danger

Hazard Statement(s): Combustible liquid. May cause an allergic skin reaction. May be fatal if swallowed and enters airways.

Precautionary Statement(s): Keep away from flames and hot surfaces. No smoking. Avoid breathing fume/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/eye protection/face protection. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other Hazards

None known

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Wt %
Petroleum distillates, hydrotreated light	64742-47-8	60-100
D-Limonene	5989-27-5	1-5
Orange, sweet, extract	8028-48-6	0.5-1.5

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Document No.: 130529-5 Release Date: 1/10/2014

Confirms to OSHA Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012

GOO GONE

Product: Goo Gone- 2028, 2030, 2030A, 2050, 2053, 2082, 2086, 2087, 2089, 2090, 2092,

2035CLIP, 2095CLIP, 2129, 2139B, 2166D, 2221D, 2223

Revision Date: 12-Jun-2018

SECTION 4 – FIRST AID MEASURES

First Aid Measures

Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Eye Contact: Rinse immediately with water for at least 15 minutes. Remove contact lenses, if worn. If irritation persists, seek medical attention immediately.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

Skin: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash with soap and water. If irritation persists, seek medical attention.

Most Important Symptoms and Effects (Acute and Delayed)

Inhalation: May cause respiratory track irritation.

Eye Contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

Skin: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause sensitization by skin contact.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physician: Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable: Treat for surrounding material.

Unsuitable: None known.

Specific Hazards Arising from Chemical

Products of combustion include but are not limited to: oxides of carbon.

Protective Equipment and Precautions for Firefighters

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Personal Precautions: Use personal protective equipment as required.

Environmental Precautions: See Section 12 for ecological information.

Methods and Material for Containment and Cleaning Up

Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). For cleaning up scoop up material and place in a disposal container. Provide ventilation.

SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Avoid breathing fume/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

General Hygiene Advice: Launder contaminated clothing before use. Wash hands before eating, drinking, or smoking.

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Release Date: 1/10/2014

Confirms to OSHA Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012



Revision Date: 12-Jun-2018

Product: Goo Gone- 2028, 2030, 2030A, 2050, 2053, 2082, 2086, 2087, 2089, 2090, 2092,

2035CLIP, 2095CLIP, 2129, 2139B, 2166D, 2221D, 2223

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Keep container closed when not in use. Store in a dry, cool, and well-ventilated area. Keep out of

reach of children.

Incompatible Materials: None known.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Guidelines:

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Petroleum distillates, hydrotreated light (64742-47-8)	200 mg/m ³	100 ppm	Not available
D-Limonene (5989-27-5)	Not available	Not available	Not available
Orange, sweet, extract (8028-48-6)	Not available	Not available	Not available

Appropriate Engineering Controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Individual Protection Measures

Respiratory Protection: None required under normal use conditions. In case of insufficient ventilation, wear suitable respiratory equipment.

Skin and Body Protection: Wear suitable protective clothing.

Eye/Face Protection: Safety glasses or goggles are recommended when using product.

General Work/Hygienic Practices: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow clear liquid

Odor: Citrus

Odor threshold: Not determined

pH: Not determined

Melting point/freezing point: Not determined

Initial boiling point and boiling range: Not determined

Flash point: 85°C (185°F) TCC Evaporation rate: Not determined Flammability (solid, gas): Flammable

Upper/lower flammability or explosive limits: Not determined

Vapor pressure: Not determined Vapor density: Not determined

Relative density: 0.80

Solubility(ies): Not determined

Partition coefficient (n-octanol/water): Not determined

Auto-ignition temperature: Not determined

Decomposition temperature: Not determined

Viscosity: Not determined

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions.

Chemical stability: Stable under recommended storage conditions.

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Confirms to OSHA Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012

GOO GONE

Revision Date: 12-Jun-2018

Product: Goo Gone- 2028, 2030, 2030A, 2050, 2053, 2082, 2086, 2087, 2089, 2090, 2092,

2035CLIP, 2095CLIP, 2129, 2139B, 2166D, 2221D, 2223

Possibility of hazardous reactions: None under normal use.

Conditions to avoid: Heat. Incompatible materials. Sources of ignition.

Incompatible materials: None known.

Hazardous decomposition products: May include and are not limited to: oxides of carbon.

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Likely Routes of Exposure: Inhalation, skin contact, eye contact, ingestion

Information Related to Physical, Chemical, and Toxicological Effects

See section 4 of this SDS.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity: NTP: No IARC: No OSHA: No

Numerical Measures of Toxicity

Product	
ATE (oral)	>2000 mg/kg, rat
ATE (dermal)	>2000 mg/kg, rabbit
ATE (inhalation)	Not available

Component Information:

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Petroleum distillates, hydrotreated light (64742-47-8)	>5000 mg/kg, rat	>2000 mg/kg, rabbit	>5.2 mg/l/4h, rat
D-Limonene (5989-27-5)	4400 mg/kg, rat	>5000 mg/kg, rabbit	Not available
Orange, sweet, extract (8028-48-6)	>5000 mg/kg, rat	>5000 mg/kg, rabbit	Not available

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Not established

Persistence and degradability: Not established
Bioaccumulative potential: Not established

Mobility in soil: No additional information available

Other adverse effects: No additional information available.

SECTION 13 – DISPOSAL CONSIDERATIONS

See section 8 of this SDS for exposure controls and personal protection.

Dispose of the product and container in accordance with all applicable local, state, and federal regulations.

SECTION 14 - TRANSPORT INFORMATION

Note: Classification changes based on quantity, packaging, and method of shipment. See current shipping paper for most up to date shipping information.

DOT (Ground): Not Regulated- See 49 CFR 173.150(f)(2) as the product is not bulk packaged.

IATA (Air): Not Regulated IMDG (Vessel): Not Regulated

SECTION 15 - REGULATORY INFORMATION

All ingredients in this product are listed or are excluded from listing on the US Toxic Substances Act (TSCA) Chemical Substance Inventory.

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Confirms to OSHA Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012



Revision Date: 12-Jun-2018

Product: Goo Gone- 2028, 2030, 2030A, 2050, 2053, 2082, 2086, 2087, 2089, 2090, 2092,

2035CLIP, 2095CLIP, 2129, 2139B, 2166D, 2221D, 2223

This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission (CPSC). The use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. The requirements of the Occupational Safety and Health Administration (OSHA) applicable to this Safety Data Sheet differ from the requirements of the CPSC and as a result, this SDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

SECTION 16 – OTHER INFORMATION

Issue Date: 23-Aug-2017 Revision Date: 12-Jun-2018

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 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 designed and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

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Release Date: 1/10/2014

Page: 1 Printed: 05/04/2015 Revision: 05/04/2015

Supersedes Revision: 11/05/2012

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Goof Off Heavy Duty

W. M. Barr **Company Name: Phone Number:** (901)775-0100

2105 Channel Avenue Memphis, TN 38113

Web site address: www.wmbarr.com

Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346 W.M. Barr Customer Service (800)398-3892 Information:

Intended Use: Mult-Purpose Remover for tar, ink, paint, adhesive, etc.

Synonyms: FG705

Additional Information This product is regulated by the United States Consumer Product Safety Commission

> and is subject to certain labeling requirements under the Federal Hazardous Substances Act. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS). The product label also includes other important information, including directions for use, and should always be read in its entirety prior to

using the product.

2. HAZARDS IDENTIFICATION

Serious Eye Damage/Eye Irritation, Category 1 Skin Sensitization, Category 1





GHS Signal Word: Danger

GHS Hazard Phrases: H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

GHS Precaution Phrases: P261: Avoid breathing gas/mist/vapors/spray.

> P272: Contaminated work clothing should not be allowed out of the workplace. P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+352: IF ON SKIN: Wash with plenty of soap and water. **GHS Response Phrases:**

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a POISON CENTER or doctor/physician.

P321: Specific treatment see label.

P333+313: If skin irritation or rash occurs, seek medical advice/attention.

P363: Wash contaminated clothing before reuse.

GHS Storage and Disposal

Phrases:

P501: Dispose of contents/container according to local, state and federal regulations.

Hazard Rating System:





HMIS:

This material is classified as hazardous under OSHA regulations. OSHA Regulatory Status:

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Potential Health Effects (Acute and Chronic):

Eyes:

May cause severe irritation, experienced as discomfort or pain, excess blinking and tear production, marked excess redness and swelling of the conjunctiva, and chemical burns of the eye.

Skin:

May cause moderate skin irritation. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. Causes redness and pain. May be harmful if absorbed through the skin.

Inhalation:

When used as directed, the consumer is not expected to experience any exposure effects. Excessive exposure may cause irritation to the upper respiratory tract. Symptoms may include a headache, dizziness, or nausea.

Ingestion:

Harmful if swallowed. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. May produce signs of intoxication characterized by incoordination, dizziness, drowsiness, headache, nausea, mental confusion, possibly slurred speech, and stupor.

Chronic Health Effects:

Diethylene glycol monobutyl ether has caused red blood cell hemolysis in laboratory animals and secondary injury to the kidney and liver. However, humans appear to be resistant to this effect.

Prolonged skin contact may cause dermatitis.

Target Organs: Blood (Hemolysis), Kidneys, Liver, Central Nervous System.

Primary Routes of Entry: Inhalation, Ingestion

Medical Conditions Generally None known.

Aggravated By Exposure:

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Hazardous Components (Chemical Name)	Concentration	RTECS#	
100-51-6	Benzenemethanol {Benzyl alcohol}	<10.0 %	DN3150000	
2568-90-3	1,1'-[Methylenebis(oxy)]dibutane	<10.0 %	NA	
27177-77-1	Benzenesulfonic acid, dodecyl-, potassium salt	<10.0 %	DB6820000	
112-34-5	Diethylene glycol monobutyl ether	< 5.0 %	KJ9100000	
	{2-(2-Butoxyethoxy)ethanol {(a glycol ether)}			

Additional Chemical

Specific percentage of composition is being withheld as a trade secret.

nformation

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4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

Skin:

Remove contaminated clothing. Immediately wash skin thoroughly with large amounts of

water and mild soap, if available. Seek medical attention if irritation develops or

persists.

Eyes:

Immediately begin to flush eyes with water, remove any contact lens. Continue to flush

the eyes for at least 15 minutes. Seek medical attention.

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult,

give oxygen. Get immediate medical attention.

Ingestion:

If swallowed, do NOT induce vomiting. Seek immediate medical attention. Call a physician or poison control center immediately. Never give anything by mouth to an

unconscious person.

Signs and Symptoms Of

Exposure:

See Potential Health Effects.

Note to Physician: Treatment of overexposure should be directed at the control of symptoms and the clinical

condition of the patient.

5. FIRE FIGHTING MEASURES

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

Suitable Extinguishing Media: Non-combustible liquid - use extinguishing media for underlying cause of fire.

Unsuitable Extinguishing

Media:

None known.

Fire Fighting Instructions: Self-

Self-contained respiratory protection should be provided for fire fighters fighting fires in

buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have

been exposed to intense heat or flame.

Flammable Properties and

Hazards:

Flashpoint: No flash to boiling. This material does not exhibit a flashpoint per the

Setaflash Closed Cup test method.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled: Prevent entry into waterways, sewers, or confined areas. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to compatible containers for proper disposal. For large spills, dike ahead of the spill.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:

Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. A source of clean water should be kept in the immediate work area for flushing of the eyes and skin.

Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

Precautions To Be Taken in

Storing:

Keep containers closed when not in use. Store in a cool, dry place, out of direct sunlight.

Protect from freezing.

Licensed to W.M. Barr and Company: MIRS MSDS, (c) A V Systems, Inc.

GHS format

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Supersedes Revision: 11/05/2012

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
100-51-6	Benzenemethanol {Benzyl alcohol}	No data.	No data.	No data.
2568-90-3	1,1'-[Methylenebis(oxy)]dibutane	No data.	No data.	No data.
27177-77-1	Benzenesulfonic acid, dodecyl-, potassium salt	No data.	No data.	No data.
112-34-5	Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}	No data.	No data.	No data.

Respiratory Equipment (Specify Type):

When used by the consumer following directions for use and with adequate ventilation,

respiratory protection is not expected to be needed.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

If the work area is not properly ventilated to keep airborne levels below their exposure limits, you must use a properly fitted and maintained NIOSH approved respirator for organic vapors. A dust mask does not provide protection against vapors.

Eye Protection: Where contact with the eyes or face is likely from spraying or splashing, safety glasses,

a faceshield or chemical goggles should be worn to prevent eye contact.

Protective Gloves: When used as directed, protective gloves should not be required. For prolonged or

repeated contact, wear gloves with as much resistance to the chemical ingredients as possible. Glove materials such as natural rubber or nitrile rubber provide protection. Glove selection should be based on chemicals being used and conditions of use.

Consult your glove supplier for additional information.

Other Protective Clothing: Various application methods can dictate use of additional protective safety equipment,

such as impermeable aprons, etc., to minimize exposure.

Engineering Controls (Ventilation etc.):

Ventilation is normally not required when handling or using this product to keep exposure

to airborne contaminants below the exposure limit.

Good general ventilation should be sufficient to control airborne levels.

Work/Hygienic/Maintenance Practices:

Wash hands thoroughly after use and before eating, drinking, smoking, or using the

restroom.

Do not eat, drink, or smoke in the work area.

Discard any clothing or other protective equipment that cannot be decontaminated.

Facilities storing or handling this material should be equipped with an emergency eyewash and safety shower.

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Supersedes Revision: 11/05/2012 9. PHYSICAL AND CHEMICAL PROPERTIES **Physical States:** [X] Liquid [] Solid [] Gas Appearance and Odor: Clear, thin, colorless to light yellow liquid. Melting Point: 32.00 F 212.00 F **Boiling Point: Autoignition Pt:** No data. Flash Pt: No data. LEL: No data. UEL: No data. **Explosive Limits:** Specific Gravity (Water = 1): 1.0022 Density: 8.34 LB/GL Vapor Pressure (vs. Air or No data. mm Hg): Vapor Density (vs. Air = 1): > 1 > 1 **Evaporation Rate:** Solubility in Water: Complete pH: 6.5 - 7.5Percent Volatile: 92.0 % by weight. VOC / Volume: 9.0000 % WT **10. STABILITY AND REACTIVITY** Stability: Unstable [] Stable [X] Conditions To Avoid -None known. Instability: Incompatibility - Materials To Strong alkalies, acids, and oxidizers. Avoid: Hazardous Decomposition Or Carbon monoxide, carbon dioxide Byproducts: Possibility of Hazardous Will occur [] Will not occur [X] Reactions: Conditions To Avoid -None known. **Hazardous Reactions:**

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11. TOXICOLOGICAL INFORMATION

Toxicological Information: Product has not been tested as a whole, Refer to section 2 for acute and chronic health

effects.

CAS# 112-34-5:

Standard Draize Test, Eyes, Species: Rabbit, 20.00 MG, Severe.

Result:

Behavioral: Anticonvulsant.

- American Journal of Ophthalmology., Ophthalmic Pub. Co., 435 N. Michigan Ave.,

Suite 1415, Chicago, IL 60611, Vol/p/yr: 29,1363, 1946

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
100-51-6	Benzenemethanol {Benzyl alcohol}	n.a.	n.a.	n.a.	n.a.
2568-90-3	1,1'-[Methylenebis(oxy)]dibutane	n.a.	n.a.	n.a.	n.a.
27177-77-1	Benzenesulfonic acid, dodecyl-, potassium salt	n.a.	n.a.	n.a.	n.a.
112-34-5	Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological

Product has not been tested as a whole.

Information:

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with all applicable local, state, and federal regulations. Do not

dump into sewers or allow to enter waterways.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not regulated by D.O.T.

DOT Hazard Class: UN/NA Number:

Additional Transport

Information:

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists CAS# **Hazardous Components (Chemical Name)** S. 302 (EHS) S. 313 (TRI) S. 304 RQ 100-51-6 Benzenemethanol {Benzyl alcohol} No No No 2568-90-3 1,1'-[Methylenebis(oxy)]dibutane No No No 27177-77-1 Benzenesulfonic acid, dodecyl-, potassium salt No No 112-34-5 Diethylene glycol monobutyl ether No No Yes-Cat. N230 {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}

This material meets the EPA [X] Yes [] No Acute (immediate) Health Hazard

'Hazard Categories' defined [X] Yes [] No Chronic (delayed) Health Hazard

for SARA Title III Sections [] Yes [X] No Fire Hazard

311/312 as indicated: [] Yes [X] No Sudden Release of Pressure Hazard

[] Yes [X] No Reactive Hazard

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GHS format

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CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
100-51-6	Benzenemethanol {Benzyl alcohol}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
2568-90-3	1,1'-[Methylenebis(oxy)]dibutane	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
27177-77-1	Benzenesulfonic acid, dodecyl-, potassium salt	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
112-34-5	Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}	CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory, 4 Test; CA PROP.65: No

Regulatory Information

All components of this material are listed on the TSCA Inventory or are exempt.

Statement:

16. OTHER INFORMATION

Revision Date: 05/04/2015

Preparer Name: W.M. Barr EHS Dept (901)775-0100

Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

Safety Data Sheet



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Product name

Graffiti Wipes

Use of the substance/mixture

Premoistened wipe

Product code

1447

Company

Total Solutions P.O. Box 240014

Milwaukee, WI 53224 - USA

T (414) 354-6417

Emergency number

: Chemtec: (800) 424-9300

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2.1. Classification of the substance or mixture

Classification (GHS-US)

Eye Irrit. 2A H319

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Warning

Hazard statements (GHS-US)

Causes serious eye irritation Wash thoroughly after handling

Precautionary statements (GHS-US)

Wear eye protection, protective clothing, protective gloves

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

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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3.1. Substance

Not applicable

Full text of H-phrases: see section 16

Mixture

Name	Product identifier	%	Classification (GHS-US)
Dimethyl Adipate	(CAS No) 627-93-0	10 - 30	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332
UNDECETH-5	(CAS No) 34398-01-1	1 - 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318

4.1. Description of first aid measures

Sign (i) (is the continue continue)

First-aid measures general

: If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation First-aid measures after skin contact If you feel unwell, seek medical advice.

Gently wash with plenty of soap and water.

First-aid measures after eye contact

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.

First-aid measures after ingestion Rinse mouth with water. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries

: Not expected to present a significant hazard under anticipated conditions of normal use.

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Safety Data Sheet

Symptoms/injuries after inhalation : None under normal use.

Symptoms/injuries after skin contact : Contact during a long period may cause light irritation. Repeated exposure may cause skin dryness

or cracking

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Gastrointestinal complaints.

Chronic symptoms : No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Sign (Oversign aufgrand grant contact to the state of the sign of

5.1. Extinguishing media

Suitable extinguishing media : Foam. Carbon dioxide. Dry chemical powder.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.

Reactivity : Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed

containers. Take account of environmentally hazardous firefighting water.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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6.1. Personal precautions, protective equipment and emergency procedures

General measures : Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel

Protective equipment : Protective goggles. Gloves. Protective clothing.

Emergency procedures : Evacuate unnecessary personnel. NO open flames, NO sparks, and NO smoking. Avoid contact with

skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers.

Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

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7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and

understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Handle and open the container with care.

Keep away from sources of ignition - No smoking.

Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible products : Oxidizing agent, strong acids, Strong bases.

Incompatible materials : Sources of ignition. Heat sources.

Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources, ignition sources.

Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: (strong) acids. (strong) bases, oxidizing agents. Storage area : Meet the legal requirements. Store in a cool area, Store in a well-ventilated place.

Special rules on packaging : meet the legal requirements.

SECTION 8 Exposure control saperstocated to the state of the same state of the same

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8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment

Use appropriate personal protective equipment when risk assessment indicates this is necessary. Safety glasses. Gloves. Protective clothing.







SECTION 9-Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Appearance

Premoistened wipe.

Odor

Mild odor

Odor threshold

No data available

pΗ

No data available No data available

Melting point Freezing point

No data available

Boiling point Flash point

No data available

163 °F Closed cup - Tested using the liquid component of the towelette

Relative evaporation rate (butyl acetate=1)

: No data available

Flammability (solid, gas)

No data available

Explosion limits

No data available

Explosive properties

No data available

Oxidizing properties

No data available

Vapor pressure

: No data available

Relative density

No data available

Relative vapor density at 20 °C

: No data available

Specific gravity / density

1.03 g/ml - Tested using the liquid component of the towelette

Solubility

Liquid component is soluble in water.

Log Pow

: No data available No data available

Log Kow

No data available

Auto-ignition temperature

Decomposition temperature

No data available

Viscosity

: No data available

Viscosity, kinematic

: No data available

Viscosity, dynamic

No data available

VOC content

< 20 % - Tested using the liquid component of the towelette

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10.1. Reactivity

Upon combustion: CO and CO2 are formed.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

strong acids. Strong bases. Oxidizing agents,

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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11.1. Information on toxicological effects

Acute toxicity : Not classified

UNDECETH-5 (34398-01-1)

LD50 oral rat > 1400 mg/kg

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard

: Not classified

Symptoms/injuries after inhalation

: None under normal use.

Symptoms/injuries after skin contact

Contact during a long period may cause light irritation. Repeated exposure may cause skin

dryness or cracking.

Symptoms/injuries after eye contact

: Causes serious eye irritation.

Symptoms/injuries after ingestion

Gastrointestinal complaints.

No data available.

Chronic symptoms
Likely routes of exposure

: Dermal

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12.1. Toxicity

Ecology - general : Not classified due to lack of data.

UNDECETH-5 (34398-0	1-1)	,	

LC50 fish 1	< 10 mg/l
EC50 Daphnia 1	< 10 mg/l
ErC50 (algae)	< 10 mg/l

12.2. Persistence and degradability

Graffiti Wipes

Persistence and degradability Not established.

12.3. Bioaccumulative potential

No additional information available

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13.1. Waste treatment methods

Waste treatment methods : Do not flush wipes.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SP444(D) នេះ 2 នៅនេះបទល្អាក្សិតពី ព័រប្រជាជាស

Department of Transportation (DOT)

In accordance with DOT: Additional information

Not regulated for transport

Other information

: No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

UNDECETH-5 (34398-01-1)			
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	 	

California Proposition 65 - This product does not contain substances known to the state of California to cause cancer and/or reproductive toxicity.

ទៀតផង(ឲ)/ម៉ូស្រី(ក្នុងព្រៃស្រា<u>យសារសារសារសារសារសារសារសារសារសារ</u>

Training advice

: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4		
Eye Dam. 1	Serious eye damage/eye irritation Category 1		
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A		
H302	Harmful if swallowed		
H318	Causes serious eye damage		
H319	Causes serious eye irritation		
H332	Harmful if inhaled		

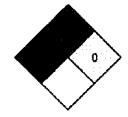
NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

: 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.

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Identification Section 1 Page E1 of E2



221 Rochester Street Avon, NY 14414 (585) 226-6177

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300

For laboratory and industrial use only. Not for drug, food or household use.

Product

GRAM'S IODINE, ALCOHOL SOLUTION

Synonyms

Gram's Iodine, Alcoholic Solution / Iodine, Potassium Iodide Solution

Section 2 Hazards identification

Signal word: DANGER

Pictograms: GHS02 / GHS07 / GHS09

Target organs: Eyes, Central nervous system, Liver, Kidneys, Thyroid



GHS Classification:

Flammable liquid (Category 2) Acute toxicity, oral (Category 5) Acute toxicity, inhalation (Category 5) Skin irritation (Category 2) Eye irritation (Category 2B) STOT-SE (Category 3) Aquatic toxicity, acute (Category 1)

GHS Label information: Hazard statement:

H225: Highly flammable liquid and vapour.

H303: May be harmful if swallowed.

H333: May be harmful if inhaled.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

H400: Very toxic to aquatic life.

Precautionary statement:

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P260: Do not breathe mist/vapours/spray. P264: Wash hands thoroughly after handling. P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312: Call a POISON CENTER or doctor if you feel unwell.

P332+P313: If skin irritation occurs: Get medical attention.

P337+P313: If eye irritation persists: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

P403+P233: Store in a well-ventilated place. Keep container tightly closed. P501: Dispose of contents/container to a licensed chemical disposal agency in

accordance with local/regional/national regulations.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / information on ingredients					
Chemical Name		CAS#	%	EINECS	
Ethyl alcohol, den	atured*	64-17-5	65.55%	200-578-6	
Water		7732-18-5	31.22%	231-791-2	
Potassium iodide		7681-11-0	1.95%	231-659-4	
lodine		7553-56-2	1.28%	231-442-4	
*Denaturants:					
Isopropyl alcohol		67-63-0		200-661-7	
Methanol		67-56-1		200-659-6	
Methyl isobutyl ke	tone	108-10-1		203-550-1	

Section 4 First aid measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL. IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES SERIOUS EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

Suitable Extinguishing Media: Dry chemical, CO₂, water spray or alcohol-resistant foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instantly. Flame may not be visible in daylight.

Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Page E2 of E2 Section 7 Handling and storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8	Exposure controls / personal protection				
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
Exposure Limits.	Ethanol	STEL: 1000 ppm / 1880 mg/m ³ (A3)	TWA: 1000 ppm / 1900 mg/m ³	TWA: 1000 ppm / 1900 mg/m ³	

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9 Physical and chemical properties

Appearance: Liquid. Deep, amber colored Odor: Mild characteristic odor. Odor threshold: Data not available

pH: Data not available.

Section 10

Melting / Freezing point: -114°C (-173°F)* Boiling point: 74-80°C (165.2-176°F)* Flash point: 21°C (70°F) TCC [70% ethanol] Evaporation rate (Ether = 1): >1

Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: 3.3% / 19.0%* Vapor pressure (mm Hg): Ca 50 @ 20°C*

Vapor density (Air = 1): Ca 1.5*

Relative density (Specific gravity): 0.7919-0.7955°C @ 60/60°F*

Molecular formula: Mixture Molecular weight: Mixture

*200 Proof Ethanol

Partition coefficient: (n-octanol / water): Low Pow: -.323

Auto-ignition temperature: 383°C (721°F)*

Viscosity: Data not available.

Decomposition temperature: Data not available.

Solubility(ies): Soluble in water.

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition. Protect from light and air.

Incompatible materials: Strong oxidizers, inorganic acids and halogens. Contact of gaseous ammonia or its solutions with lodine should be avoided to prevent the formation

of the explosive "nitrogen iodide". May be corrosive to most metals.

Stability and reactivity

Hazardous decomposition products: Carbon oxides and corrosive fumes of iodine.

Section 11 **Toxicological information**

Acute toxicity: Ethanol: Oral-rat LD50: 7060 mg/kg; Inhalation-rat LC50: 124.7 mg/l/4hours, Iodine: Oral-rat LD50: 14,000 mg/kg, Potassium iodide: Oral-rat LD50: 4800 mg/kg

Skin corrosion/irritation: Skin-rabbit - Slight irritant. Serious eye damage/irritation: Eyes-rabbit - Severe irritant. Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC classified: Group 3: Not classifiable as to its carcinogenicity to humans. [Isopropanol]

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

CA Prop 65: A WARNING!: This product can expose you to chemicals including Methanol and Methyl isobutyl ketone, which are known to the State of California to cause

cancer and reproductive harm.

Reproductive toxicity: Data not available

STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: Inhalation may cause dizziness, drowsiness, nausea, vomiting, inability to concentrate and irritation of the throat. Ingestion: Ingestion causes dizziness, drowsiness, decreased reaction, euphoria, nausea, vomiting, staggering gait and coma.

Skin: Contact with skin causes irritation defatting on prolonged contact.

Eves: Contact with eves may cause blindness.

Signs and symptoms of exposure: See Potential health effects above.

Additional information: RTECS #: KQ6300000 [Ethanol]

Section 12 **Ecological information**

Toxicity to fish: Oncorhynchus mykiss (fish, fresh water), LC50 = 11,200 mg/l/24 hours [Ethanol]

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacia), EC50 = 10,800 mg/l/24 hours [Ethanol, 99.8% pure]

Toxicity to algae: Chlorella pyrenoidosa (Algae), EC50 = 9,310 mg/l/growth rate [Ethanol, absolute] Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: Very toxic to aquatic life.

Disposal considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Transport information Section 14

UN/NA number: UN1170 Shipping name: Ethanol solution

Hazard class: 3 Packing group: || Reportable Quantity: 5,000 lbs (2270 kg) Marine pollutant: No

2020 ERG Guide # 127 Exceptions: Limited quantity equal to or less than 1 L

Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Ethanol	Listed	Not listed	D001	Listed	Not listed	★ WARNING -Cancer and
Methanol	Listed	5,000 lbs.	U154	Listed	Not listed	Reproductive Harm
Isopropanol	Listed	Not listed	Not listed	Listed	Not listed	- www.P65Warnings.ca.gov.

Section 16 Other information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: October 1, 2020 Supercedes: December 5, 2019 Form 06/2015

SDS No.: GG0225

Section 1 Chemical Product and Company Information

Page E1 of E2



221 Rochester Street Avon, NY 14414 (585) 226-6177 CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only. Not for drug, food or household use.

Product	GRAPHITE
	Graphite Powder / Natural Graphite / Carbon, Black Lead

Section 2 Hazards identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: None required Pictograms: No symbol required

Target organs: Respiratory system, Cardiovascular system

GHS Classification: None required

GHS Label information: Hazard statement: None required

Precautionary statement: None required

Supplemental information

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Chemical Name	CAS#	%	EINECS	
Graphite, natural	7782-42-5	100%	231-955-3	
May contain: Silica, (as quartz)	14808-60-7	1.5-4.0%	238-878-4	

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

- Section 6 x - Fr S. Accidental Release Measures - X

Suitable Extinguishing Media: Dry chemical, CO2, water spray or regular foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Graphite is a conductor of electricity. Use caution when handling in areas where contact with eletrical circuitry is possible. At temperatures above 1500°C, graphite reacts with substances containing oxygen, including water and carbon dioxide. In case of intensely hot fire events, use sand to cover and isolate graphite..

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Handling & Storage Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources. Exposure Controls / Personal Protection NIOSH (REL) Chemical Name ACGIH (TLV) OSHA (PEL) TWA: 2 R mg/m³ TWA: 15 mppcf TWA: 2.5 mg/m³ Graphite, natural Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator Section 9 Physical & Chemical Properties Appearance: Solid, Gray to black powder Evaporation rate (= 1): Data not available Partition coefficient: Data not available Flammability (solid/gas): Data not available Odor: No odor Auto-ignition temperature: >500°C (932°F) Explosion limits: Lower / Upper: Data not available Decomposition temperature: Oxidizes @ >400°C Odor threshold: Data not available Vapor pressure (mm Hg): 0 mmHg Viscosity: Data not available pH: Data not available Melting / Freezing point: Sublimes @ 3652°C Vapor density (Air = 1): Data not available Molecular formula: C Boiling point: Data not available Relative density (Specific gravity): 2.26 Molecular weight: 12.01 Flash point: Data not available Solubility(ies): Insoluble in water Section 10 Stability & Reactivity Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: Stable under normal and fire conditions. Avoid contact with incompatible material. Incompatible materials: Strong oxidizers, such as fluorine, chlorine trifluoride and potassium peroxide. Hazardous decomposition products: Carbon exides. Section 1 ... | Oxicological Inform Acute toxicity: Data not available Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available Carcinogenity: Data not available NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. IARC classified: Group 1: Carcinogenic to humans. [Silica dust, in the form of quartz] OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity. Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available Potential health effects: Inhalation: Inhalation of dusts may cause irritation, cough, black sputum, and decreased pulmonary function. Ingestion: Not expected to be an ingestion hazard. Skin: Prolonged contact may cause drying of skin. Eyes: Contact with eyes may cause mechanical irritation. Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards Additional information: RTECS #: MD9659600 Godion (care of a Education of the Colorest of Toxicity to fish: No data available Toxicity to daphnia and other aquatic invertebrates: No data available Toxicity to algae: No data available Persistence and degradability: No data available Bioaccumulative potential: No data available

Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

UN/NA number: Not applicable Shipping name: Not Regulated

Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No

Exceptions: Not applicable 2012 ERG Guide # Not applicable

CHECK CONTROL OF THE PROPERTY OF THE PROPERTY

Continue to the continue of the continue of A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list DSL NDSL WHMIS Classification Component **TSCA** CERLCA (RQ) RCRA code 1 isted Not listed Not listed Graphite Listed Not listed Not listed

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Revision Date: March 24, 2014 Supercedes: March 24, 2014

Graphite Powder



Product Description Section 1

Graphite Powder **Product Name:**

Science education applications Recommended Use: Graphite, Natural; Carbon, Black Lead Synonyms: Carolina Biological Supply Company Distributor: 2700 York Road, Burlington, NC 27215

1-800-227-1150

800-227-1150 (8am-5pm (ET) M-F) Chemical Information:

800-424-9300 (Transportation Spill Response 24 hours) Chemtrec:

Section 2

Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

WARNING



Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

GHS Classification:

Serious Eye Damage/Eye Irritation Category 2A, Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

100 % of the mixture consists of ingredient(s) of unknown toxicity **Acute Toxicity Oral Contains** 100 % of the mixture consists of ingredient(s) of unknown toxicity **Acute Toxicity Dermal Contains** 100 % of the mixture consists of ingredient(s) of unknown toxicity Acute Toxicity Inhalation Gas Contains

Acute Toxicity Inhalation Vapor

Contains

Acute Toxicity Inhalation Dust/Mist

Contains

100 % of the mixture consists of ingredient(s) of unknown toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3

Composition / Information on Ingredients

<u>%</u> CAS# Chemical Name 100 7782-42-5 Graphite Powder

Section 4

First Aid Measures

Emergency and First Aid Procedures

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Inhalation:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy Eyes:

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention,

After contact with skin, wash immediately with plenty of water. Skin Contact:

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Ingestion:

Section 5

Firefighting Procedures

Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or Extinguishing Media:

foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do Not direct a stream of water into the hot

burning liquid.

Page 1 of 4 Graphite Powder

Firefighters should wear full protective equipment and NIOSH approved self-contained Fire Fighting Methods and Protection:

breathing apparatus.

Fire and/or Explosion Hazards:

Carbon dioxide, Carbon monoxide **Hazardous Combustion Products:**

Section 6

Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Avoid creating dusts. Eliminate ignition sources. If a vacuum is used, ensure that the material is wetted or otherwise treated so an explosive dust atmosphere is not created within the vacuum. Avoid contact with material, avoid breathing dusts or fumes, use only in a well ventilated area.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Contain the discharged material.

Section 7

Handling and Storage

Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-Handling:

ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Keep container tightly closed in a cool, well-ventilated place. Keep away from oxidizing materials and strong acids. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Harmful by inhalation. Avoid contact with eyes. Use only in well-ventilated areas. Take precautionary measures against

static discharges.

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

cool, well-ventilated place.

Green - general chemical storage Storage Code:

Section 8

Graphite Powder

Protection Information

OSHA PEL ACGIH (TWA) (TWA) (STEL) **Chemical Name**

2 mg/m3 TWA (all N/A forms except graphite fibers, respirable fraction)

(STEL) 15 mg/m3 TWA

N/A

(synthetic, total dust); 5 mg/m3 TWA (synthetic, respirable fraction)

Control Parameters

Local exhaust ventilation or other engineering controls are normally required when **Engineering Measures:**

handling or using this product to avoid overexposure.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use. Wear a NIOSH

approved respirator if any exposure is possible.

NIOSH approved air purifying respirator with dust/mist filter. Respirator Type(s):

Wear chemical splash goggles when handling this product. Have an eye wash station Eye Protection:

available.

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective Skin Protection:

equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving

work.

Nitrile Gloves:

Section 9

Physical Data

Formula: C

Molecular Weight: 12.01 Appearance: Grey Powder Odor: No data available

Vapor Pressure: N/A

Evaporation Rate (BuAc=1): N/A Vapor Density (Air=1): N/A Specific Gravity: 2.20-2.35

Odor Threshold: No data available

pH: No data available

Melting Point: No data available 3652 - 3697 C

Boiling Point: No data available Flash Point: No data available Flammable Limits in Air: N/A

Solubility in Water: Practically Insoluble Log Pow (calculated): No data available Autoignition Temperature: No data available Decomposition Temperature: No data available

Viscosity: No data available Percent Volatile by Volume: N/A

Section 10

Reactivity Data

Reactivity:

Stable under normal conditions.

Chemical Stability: Conditions to Avoid:

None known.

Incompatible Materials:

Strong oxidizing agents

Hazardous Decomposition Products: Hazardous Polymerization:

Carbon oxides Will not occur

No data available

Section 11

Toxicity Data

Routes of Entry Symptoms (Acute):

N/A N/A

Delayed Effects:

No data available

Acute Toxicity:

Chemical Name

CAS Number

Oral LD50

Dermal LD50

Inhalation LC50

No data available

7782-42-5

Not determined

Not determined

Not determined

Carcinogenicity:

Chemical Name

CAS Number

IARC

NTP

OSHA

No data available

7782-42-5

Not listed

Not listed

Not listed

Chronic Effects:

Mutagenicity:

No evidence of a mutagenic effect.

Teratogenicity:

No evidence of a teratogenic effect (birth defect).

Sensitization: Reproductive: No evidence of a sensitization effect. No evidence of negative reproductive effects.

Target Organ Effects:

Acute:

See Section 2

Chronic:

Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12

Ecological Data

This material is not expected to be harmful to the ecology. Keep out of waterways. Overview:

Mobility: No data No data Persistence: No data Bioaccumulation: No data Degradability: Other Adverse Effects: No data

Chemical Name

CAS Number

Eco Toxicity

7782-42-5 N/A

Section 13

Disposal Information

Disposal Methods:

Dispose in accordance with all applicable Federal, State and Local regulations. Always

contact a permitted waste disposer (TSD) to assure compliance.

Not Determined Waste Disposal Code(s):

Section 14

Transport Information

Ground - DOT Proper Shipping Name:

Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

Section 15

N/A

Regulatory Information

Page 3 of 4 Graphite Powder

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name CAS § 313 Name § 304 RQ CERCLA RQ § 302 TPQ CAA 112(2)

Number TQ

No data available 7782-42-5 No No No No No

Section 16 Additional Information

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

National Toxicology Program ACGIH American Conference of Governmental NTP Occupational Safety and Health Administration OSHA Industrial Hygienists Permissible Exposure Limit Chemical Abstract Service Number PEL CAS Parts per million Comprehensive Environmental Response, **CERCLA** ppm Compensation, and Liability Act RCRA Resource Conservation and Recovery Act

DOT U.S. Department of Transportation SARA Superfund Amendments and Reauthorization Act

IARC International Agency for Research on Cancer TLV Threshold Limit Value TSCA Toxic Substances Control Act

IDLH Immediately dangerous to life and health

Graphite Powder Page 4 of 4

GRAVIMETRIC ANALYSIS OF A METAL CARBONATE - AP CHEMISTRY LAB KIT # AP6378

FLINN SCIENTIFIC

In the Gravimetric Analysis of a Metal Carbonate Classic Lab Kit for AP* Chemistry, students determine the identity of a Group 1 metal carbonate by gravimetric analysis. Students gain valuable experience in the gravimetric analysis process.

Chemicals Included:

Calcium chloride solution, 0.2 M, 500 mL, 4 Potassium carbonate, 60 g, 2 Sodium carbonate, 50 g, 2

PLEASE LOOK UP CHEMICAL SDS'S INDIVIDUALLY



SAFETY DATA SHEET

Revision Date 08-Sep-2015 Version 1

1. IDENTIFICATION

Product identifier

Product Name Great Value Morning Meadow Scent Disinfectant Spray

Other means of identification

 Product UPC
 78742-10515

 Product Code
 30433060201

 UN/ID no.
 1950

Recommended use of the chemical and restrictions on use

Recommended Use Disinfectant.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address Distributor

KIK International LLC

33 Macintosh Blvd.

Concord, Ontario

Canada L4K 4L5

Wal-Mart Stores, Inc.
702 SW 8th ST.
Bentonville, AR 72712
1-877-505-2267

1-800-479-6603

Emergency telephone number

Emergency Telephone Poison Control Center (Medical): (866) 366-5048

Chemtel (Transportation) 1-888-255-3924

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity	Category 1B
Flammable aerosols	Category 2

Label elements

Emergency Overview

Danger

Hazard statements

May cause cancer Flammable aerosol





Color colorless Physical state Aerosol, liquid Odor Aromatic

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

0.32556% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	CAS No.	Weight-%
Ethanol	64-17-5	53.088
Isobutane	75-28-5	5 - 10
Propane	74-98-6	1 - 4
Sodium nitrite	7632-00-0	0.1 - 0.5

4. FIRST AID MEASURES

Description of first aid measures

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water. If symptoms persist, call a physician.

Inhalation Remove to fresh air.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. If

symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO2, water spray or alcohol-resistant foam.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Containers may explode when heated.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not

puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. Handle in accordance with good industrial hygiene and safety practice. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and

static electricity).

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in accordance with NFPA 30B for Level 1 aerosols. Keep container tightly closed in a

dry and well-ventilated place. Keep away from heat. Protect from sunlight. Do not expose to

temperatures exceeding 50 °C/122 °F.

Incompatible materials No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol	STEL: 1000 ppm	TWA: 1000 ppm	IDLH: 3300 ppm
64-17-5		TWA: 1900 mg/m ³	TWA: 1000 ppm
		(vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	TWA: 1900 mg/m ³
Isobutane 75-28-5	STEL: 1000 ppm	-	TWA: 800 ppm TWA: 1900 mg/m³
Propane 74-98-6	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m ³	IDLH: 2100 ppm TWA: 1000 ppm
		(vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m³	TWA: 1800 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

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

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Aerosol, liquid

Appearance No information available Odor Aromatic

Color colorless Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 8-9

Melting point/freezing pointNo information availableBoiling point / boiling rangeNo information availableFlash pointNo information availableEvaporation rateNo information availableFlammability (solid, gas)No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available Vapor density No information available **Specific Gravity** No information available Water solubility No information available Solubility in other solvents No information available No information available Partition coefficient Autoignition temperature No information available No information available **Decomposition temperature** No information available Kinematic viscosity No information available Dynamic viscosity

DensityNo information availableBulk densityNo information availableExplosive propertiesNo information availableOxidizing propertiesNo information available

Other Information

Softening point
Molecular weight
VOC Content (%)
No information available
No information available
No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

No information available.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system.

Eye contact May cause slight irritation.

Skin contact Not expected to cause skin irritation under normal use conditions.

Ingestion Ingestion may cause irritation to mucous membranes.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol 64-17-5	= 7060 mg/kg (Rat)		= 124.7 mg/L (Rat)4 h
Isobutane 75-28-5	-	,	= 658 mg/L (Rat)4 h
Propane 74-98-6	-	1	= 658 mg/L (Rat)4 h
Sodium nitrite 7632-00-0	= 85 mg/kg (Rat)	i	= 5.5 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo information available.Germ cell mutagenicityNo information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Ethanol has been shown to be carcinogenic in long-term studies only when consumed as

alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium nitrite	-	Group 2A	-	X
7632-00-0				

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
No information available.
No information available.

Chronic toxicity Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic

beverage. Ethanol has been shown to be carcinogenic in long-term studies only when

consumed as alcoholic beverage.

Target Organ EffectsCentral nervous system.Aspiration hazardNo information available.

Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

10.32556% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ethanol 64-17-5	-	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50
Sodium nitrite 7632-00-0	-	0.19: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.092 - 0.13: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.4 - 0.6: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.65 - 1: 96 h Oncorhynchus mykiss mg/L LC50 static 2.3: 96 h Pimephales promelas mg/L LC50 flow-through 20: 96 h Pimephales promelas mg/L LC50 static	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Chemical Name	Partition coefficient
Ethanol 64-17-5	-0.32
Isobutane 75-28-5	2.88
Propane 74-98-6	2.3
Sodium nitrite 7632-00-0	-3.7

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container. Refer to all federal, state and local regulations prior to disposal of

container and unused contents by reuse, recycle or disposal.

14. TRANSPORT INFORMATION

Note: Limited quantity (LQ) exception is possible

DOT

UN/ID no. 1950

Proper shipping name AEROSOLS

Hazard Class 2.1 Packing Group None

Description UN1950, AEROSOLS, 2.1

IATA

UN/ID no. 1950

Proper shipping name AEROSOLS, FLAMMABLE

Hazard Class 2.1 Packing Group None

Description UN1950, AEROSOLS, FLAMMABLE, 2.1

IMDG

UN/ID no. 1950

Proper shipping name AEROSOLS

Hazard Class 2.1 Packing Group None

Description UN1950, AEROSOLS, 2.1

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard No
Chronic Health Hazard No
Fire hazard Yes
Sudden release of pressure hazard Yes
Reactive Hazard No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium nitrite 7632-00-0	100 lb	-	-	Х

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium nitrite	100 lb		RQ 100 lb final RQ
7632-00-0	40000 mile 100000		RQ 45.4 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	Х	X	X
Isobutane 75-28-5	Х	X	Х
Propane 74-98-6	Х	X	X
Sodium nitrite 7632-00-0	Х	X	Х

U.S. EPA Label Information

EPA Pesticide Registration Number 11525-30-41348

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Difference between SDS and EPA Pesticide label

CAUTION: Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 1 Flammability 3 Instability 0 Physical and Chemical Properties -

Health hazards 1* Flammability 3 Physical hazards 0 Personal protection B

Prepared By Regulatory Affairs
Revision Date Resp-2015

Revision Note No information available

Disclaimer

The information provided in this Material 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.

End of Safety Data Sheet

Page 1 of 6

Product Description: F75V405 139361-5 GREEN AEROSOL

MATERIAL SAFETY DATA SHEET

SECTION 1: MANUFACTURER IDENTIFICATION

MANUFACTURED BY: FORMAT # 7427-1

STERLING COLORS LLC 24-hour Emergency Phone: (920) 740-7959

GREENVILLE, WI 54942

Product Information Phone Number: (920) 757-6967

DATE MSDS PRINTED & REVIEWED: 09/11/12 LAST FORMULA REVISION DATE: 08/31/12

MANUFACTURED FOR: GAMETIME INC FORT PAYNE, AL 35967

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

OLO	TION 2. COM ODITION, INTORNAL	TON ON THORE	DILLITO				
				SARA 313	LISTED	CARCINO	GEN BY:
#	COMPONENT	CAS#	% by WT.	LISTED	NTP	IARC	OSHA
1	ACETONE	67-64-1	30-36	N	N	N	N
2	PROPANE	74-98-6	15-21	N	N	N	N
3	XYLENE	1330-20-7	10-16	Y	N	N	N
4	*TOLUENE	108-88-3	8-10	Y	N	N	N
5	N-BUTANE	106-97-8	5-8	N	N	N	N
6	*ETHYLBENZENE	100-41-4	3-5	Y	N	Y	N
7	VM&P NAPHTHA	64742-89-8	1-3	N	N	N	N
8	PM ACETATE	108-65-6	1-3	N	N	N	N

^{*}See Section 15 and Section 11

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview: DANGER! Extremely Flammable. Contents Under Pressure.

APPEARANCE/ODOR: Liquid Spray Mist / Solvent Odor

POTENTIAL HEALTH EFFECTS: See Section 11 for more information.

LIKELY ROUTES OF EXPOSURE: Eye contact, skin contact, ingestion, and inhalation EYE: Contact may cause redness, irritation, tearing, and blurred vision

SKIN: Contact may dry skin causing cracks and irritation

INGESTION: May be harmful if swallowed

INHALATION: Exposure to high concentrations of vapors may cause drowsiness, breathing

difficulty, respiratory irritation, or headaches. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or

fatal.

Page 2 of 6

Product Description: F75V405 139361-5 GREEN AEROSOL MATERIAL SAFETY DATA SHEET

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Asthma and other respiratory ailments.

TARGET ORGANS: Kidney Liver Lung Brain

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

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

SECTION 4: FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with water for at least 15 minutes. If

irritation develops get medical attention.

SKIN CONTACT: Remove contaminated clothing and wash before reuse. Wash skin with soap

and water. Get medical attention if irritation develops.

INHALATION: Move to fresh air. Contact emergency medical support if breathing

stops or is irregular.

INGESTION: Do NOT induce vomiting. Get medical attention immediately.

SECTION 5: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: CO2 (Carbon Dioxide), dry chemical, or water fog.
UNSUITABLE EXTINGUISHING MEDIA: Water spray may be unsuitable. However, if water is
used, fog nozzles are preferable. Water may be used to cool closed containers
to prevent pressure build-up and possible explosion when exposed to extreme
heat.

PRODUCTS OF COMBUSTION: These products are carbon oxides (CO,CO2). PROTECTION OF FIREFIGHTERS: Full protective equipment including self-contained breathing apparatus should be used.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Use personal protection recommended in Section 8. ENVIRONMENTAL PRECAUTIONS: None known.

Page 3 of 6

Product Description: F75V405 139361-5 GREEN AEROSOL

MATERIAL SAFETY DATA SHEET

METHODS OF CONTAINMENT: Absorb spilled liquid in suitable material.

METHODS OF CLEAN-UP: Use spark-proof tools to sweep or scrape up and containerize.

OTHER INFORMATION: Ventilate the area.

SECTION 7: HANDLING AND STORAGE

HANDLING:

Vapors may ignite explosively. Prevent buildup of vapors; use with adequate ventilation. Keep from sparks, heat, flame or other heat sources. Do not smoke. Turn off pilot lights, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Do not puncture or incinerate (burn) container.

STORAGE:

Store in dry, well-ventilated area and in accordance with federal, state, and local regulations. Do not expose to heat or store at temperatures above 120 F (48 C). Storage conditions should comply with NFPA 30B and OSHA 1910.106. If storing in cold temperatures, allow product to warm to room temperature before use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES

#	COMPONENT	ACGIH TLV-STEL	ACGIH TLV-TWA	OSHA PEL-TWA
1	ACETONE	750 ppm	500 ppm	1000 ppm
2	PROPANE	1800 ppm	2500 ppm	1000 ppm
3	XYLENE	150 ppm	100 ppm	100 ppm
4	*TOLUENE	N/E	50.0 ppm	200.0 ppm
5	N-BUTANE	N/E	800 ppm	800 ppm
6	*ETHYLBENZENE	125 ppm	100 ppm	100 ppm
7	VM&P NAPHTHA	N/E	300 ppm	300 ppm
8	PM ACETATE	N/E		N/E
*Se	e Section 15 and Section 11			

ENGINEERING CONTROLS: Not generally required if product is applied in small quantities. If product is applied in larger quantities, provide ventilation to keep air contamination below OSHA permissible exposure limits and ACGIH TLV exposure levels.

EYE/FACE PROTECTION: Wear safety glasses with side shields. Have eye wash facilities immediately available.

SKIN PROTECTION: Chemical resistant gloves if contact is likely.

RESPIRATORY PROTECTION: Use NIOSH-approved air-purifying respirator with organic cartridge or canister if exposure cannot be controlled within applicable limits with ventilation.

GENERAL HYGIENE CONSIDERATIONS: Wash thoroughly after handling.

Page 4 of 6

Product Description: F75V405 139361-5 GREEN AEROSOL MATERIAL SAFETY DATA SHEET

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color: see product description

Odor: Solvent Odor

Physical State: Aerosol - Pressurized Liquid Freezing Point: Not Established (mixture) Boiling Range: <-18 C to 177 C (<0 F to 350 F)

Flash Point: <-18 C (<0 F)

Evaporation Rate: Faster than ether

Upper Flammability Limit: Not Established (mixture) Lower Flammability Limit: Not Established (mixture) Vapor Pressure: Approximately 50 psig @ 10 C (70 F) Specific Gravity: @15 C (60 F)

Solubility (water): Negligible Percent Volatile, wt.: 80-84% VOC Percent: 88% MAX MIR Number: 2.05 MAX

Coating Category: EFI (EXACT-MATCH FINISH INDUSTRIAL)

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Keep away from heat, sparks, and flames.

INCOMPATIBLE MATERIALS: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: by fire - Carbon Dioxide and Carbon Monoxide

POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur.

Page 5 of 6

Product Description: F75V405 139361-5 GREEN AEROSOL

MATERIAL SAFETY DATA SHEET

SECTION 11: TOXICOLOGICAL INFORMATION

#	COMPONENT	LD50 Oral	LD50 Dermal	
1	ACETONE	1000 mg/kg	2400 mg/kg	
2	PROPANE	1000 mg/kg	1800 mg/kg	
3	XYLENE	4300 mg/kg	2000 mg/kg	
4	*TOLUENE	637 mg/kg	14100 mg/kg	
5	N-BUTANE	N/E	N/E	
6	*ETHYLBENZENE	3500 mg/kg	5000 mg/kg	
7	VM&P NAPHTHA	N/E	N/E	
8	PM ACETATE	8535 mg/kg	5000 mg/kg	
*See Section 15				

See section 3 for other acute effect information.

CHRONIC EFFECTS: Prolonged over-exposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary, cardiovascular and reproductive systems. Reports have associated the repeated and prolonged occupational OVER-EXPOSURE to solvents with brain and nervous system damage. The deliberate misuse by concentrating and inhaling the vapors may be harmful or fatal. CARCINOGENICITY: See Section 2 for additional information.

* Ethylbenzene has been classified as a (Group 2B) possible human carcinogen based on tests on laboratory animals by (IARC) The International Agency for Research on Cancer. There is inadequate evidence for cancer in exposed humans.

SECTION 12: ECOLOGICAL INFORMATION

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Do not puncture, incinerate or place container in trash compactor. Dispose of product in accordance with Federal, State, and Local regulations. Empty containers are 95% steel; recycle where allowed.

Page 6 of 6

Product Description: F75V405 139361-5 GREEN AEROSOL

MATERIAL SAFETY DATA SHEET

SECTION 14: TRANSPORTATION INFORMATION

US DOT (Ground)

Proper Shipping Name: Consumer Commodity

Hazard Class: ORM-D

US DOT (Air)

Proper Shipping Name: Consumer Commodity

Hazard Class: ORM-D-AIR

IATA/ICAO (International Air)

Proper Shipping Name: Aerosols, Flammable

ID no.: UN1950 Hazard Class: 2.1

Hazard Label: Flammable Gas

Packing Instruction: 203 (NOTE, must be shipped in proper U.N.-certified box!)

No component of this product is listed as a Marine Pollutant (49 CFR 172,101,Appendix B).

SECTION 15: REGULATORY INFORMATION

International Chemical Inventory

TSCA: United States The components of this product are listed on the TSCA inventory.

DSL: Canada The components of this product are listed on the DSL inventory.

AICS: Australia The components of this product are listed on the AICS inventory.

Section 313 Toxic Chemicals

See section 2. Chemicals marked with a "Y" are subject to the SARA reporting requirements under 40 cfr 372.45(c)(5).

*California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

SECTION 16: OTHER INFORMATION

HMIS: Hazardous Material Identification System

Health - 2 Fire - 4 Reactivity - 1

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

This MSDS is based on information believed to be reliable and accurate. Because of changing reporting requirements and other variables it is impossible to guarantee the accuracy of the information contained in this document. It is the responsibility of the user to determine proper personal protection based on the actual condition of use and to comply with all Federal, State and Local laws and regulations.

SAFETY DATA SHEET

Product Number 870

Issuing Date No data available

Revision Date 05/28/15

Revision Number 2



The supplier identified below generated this SDS using the UL SDS template. UL did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by the supplier or was reproduced from publically available regulatory data sources. UL makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability in connection with the use of this information or the substance described in this SDS. The layout, appearance and format of this SDS is © 2014 UL LLC. All rights reserved.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name

Gum Spirits of Turpentine

Other means of identification

Synonyms

None

Recommended use of the chemical and restrictions on use

Recommended Use

Paint Thinner (*Note Future CARB requirements: 2013 - 3 wt%)

Uses advised against

No information available

Details of the supplier of the safety data sheet

Supplier Name

Sunnyside Corporation

Supplier Address

225 Carpenter Avenue

Wheeling

ΙL

60090

US

Supplier Phone Number

Phone:8003238611

Fax:8475419043

Supplier Email

sscontact@sunnysidecorp.com

Emergency telephone number

Chem Trec 8004249300

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids

Category 3

GHS Label elements, including precautionary statements

Emergency Overview -

Signal word

Warning



Flammable liquid and vapor



Appearance Clear

Physical State Liquid

Odor Pine

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof electrical/ ventilating/ lighting/ equipment Use only non-sparking tools Take precautionary measures against static discharge Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity

Other information

PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION May cause slight eye irritation

Interactions with Other Chemicals

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Gum Turpentine	9005-90-7	60 - 100	

4. FIRST AID MEASURES

First aid measures

Eye Contact If symptoms persist, call a physician. Rinse immediately with plenty of water, also

under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue

rinsing.

Skin Contact In the case of skin irritation or allergic reactions see a physician. Wash off

immediately with soap and plenty of water while removing all contaminated clothes

and shoes.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, (trained personnel should) give oxygen.

Ingestion Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a

physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take

precautions to protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and No information available.

Effects

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, CO2, water spray or regular foam. Use water spray or fog; do not use straight streams.

Unsuitable Extinguishing Media

CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Some may be transported hot.

Uniform Fire Code

Flammable Liquid: I-C

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact

No.

Sensitivity to Static Discharge

Yes.

Protective equipment and precautions for firefighters

Move containers from fire area if you can do it without risk.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other Information

Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Environmental Precautions

Environmental Precautions

Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for Containment

A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth,

sand or other non-combustible material and transfer to containers.

Methods for cleaning up

Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Use

clean non-sparking tools to collect absorbed material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers.

Incompatible Products

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Measures

Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Tight sealing safety goggles.

Skin and Body Protection

Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves. Antistatic boots.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties



Physical State Appearance

Color

Liquid Clear

Pale vellow to water / white

Odor Odor Threshold Pine

No information available

Property рH

Melting / freezing point Boiling point / boiling range Flash Point **Evaporation Rate** Flammability (solid, gas) Flammability Limit in Air

Values ÜNKNOWN No data available No data available 33 C / 91 F No data available No data available

Remarks/ Method None known None known None known None known None known None known

No data available Upper flammability limit No data available Lower flammability limit No data available Vapor pressure No data available Vapor density No data available Specific Gravity Negligible Water Solubility No data available Solubility in other solvents Partition coefficient: n-octanol/waterNo data available No data available Autoignition temperature No data available Decomposition temperature No data available Kinematic viscosity No data available **Dynamic viscosity** No data available **Explosive properties** No data available **Oxidizing Properties**

None known None known

Other Information

Softening Point VOC Content (%) Particle Size

No data available No data available No data available

Particle Size Distribution

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION



Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation Specific test data for the substance or mixture is not available.

Eye Contact Specific test data for the substance or mixture is not available.

Skin Contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Component Information

Sensitization

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No information available.

Mutagenic Effects No information available.

Carcinogenicity Contains no ingredient listed as a carcinogen.

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Chronic Toxicity No known effect based on information supplied.

Target Organ Effects None known.

Aspiration Hazard No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document Not applicable

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Persistence and Degradability

No information available.

Bioaccumulation

No information available

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Gum Turpentinesoaked materials may spontaneously combust and should be properly managed to avoid ignition and heat sources or oxygen rich environments. Collect and store soaked materials in closed, water filled metal containers to help prevent combustion.

Contaminated Packaging

Dispose of contents/containers in accordance with local regulations.

US EPA Waste Number

D001

California Hazardous Waste Codes 213

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste	
Gum Turpentine	Toxic	
	lgnitable	

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name

CONSUMER COMMODITY

Hazard Class

ORM-D

Description

CONSUMER COMMODITY, ORM-D

Emergency Response Guide

128

Number

TDG

ŪN-No.

UN1299

Proper Shipping Name

TURPENTINE

Hazard Class

3

Packing Group

111

Description

UN1299, TURPENTINE, 3, III

MEX

UN-No.

UN1299

Proper Shipping Name

TURPENTINE

Hazard Class

3



Packing Group

UN1299 TURPENTINE, 3, III Description

Ш

ICAO

UN1299 UN-No. TURPENTINE **Proper Shipping Name**

Hazard Class 3 Ш **Packing Group**

UN1299, TURPENTINE, 3, III Description

IATA

UN1299 UN-No. TURPENTINE **Proper Shipping Name**

3 **Hazard Class** Ш **Packing Group**

UN1299, TURPENTINE, 3, III Description

IMDG/IMO

UN1299 UN-No. TURPENTINE **Proper Shipping Name**

3 **Hazard Class** Ш **Packing Group** F-E, S-E EmS No.

UN1299, TURPENTINE, 3, III, FP 33C Description

RID

UN1299 UN-No. TURPENTINE **Proper Shipping Name**

Hazard Class Ш Packing Group Classification code

UN1299 TURPENTINE, 3, III Description

ADR

UN1299 UN-No. TURPENTINE **Proper Shipping Name**

3 **Hazard Class** Ш **Packing Group** Classification code

UN1299 TURPENTINE, 3, III Description

ADN

UN1299 UN-No. TURPENTINE **Proper Shipping Name**

Hazard Class 3 **Packing Group** 111 Classification code F1

UN1299 TURPENTINE, 3, III Description

3 **Hazard Labels** 5 L **Limited Quantity** VE01 Ventilation

15. REGULATORY INFORMATION

International Inventories

TSCA

All components are listed either on the DSL or NDSL. DSL

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory



DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Gum Turpentine			Х		

International Regulations

WHMIS Hazard Class B2 - Flammable liquid



16. OTHER INFORMATION					
NFPA	Health Hazards 1	Flammability 3	Instability 0	Physical and Chemical Hazards -	
HMIS	Health Hazards 1	Flammability 3	Physical Hazard 0	Personal Protection X	



Prepared By

Product Stewardship

23 British American Blvd.

Latham, NY 12110 1-800-572-6501 17-Sep-2014

Revision Date

Revision Note

No information available

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

End of Safety Data Sheet