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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 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Gallium	7440-55-3	Ga	69.72	

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.

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.	Boiling point: 2403 °C
Soluble: Acid and alkalis. Slightly in mercury.	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.	ORL-RAT LD ₅₀ : N.A.
Chronic effects: Depression of bone marrow function. Metallic taste, anorexia, nausea, vomiting.	IHL-RAT LC ₅₀ : N.A.
Target organs: N.A.	SKN-RBT LD ₅₀ : 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.

Revision Date: March 21, 2014



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



- 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.



Hazardous Combustion Products:

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

Inappropriate Extinguishing Media:

Straight streams of water

FLAMMABILITY PROPERTIES

NFPA Hazard Classification:

Health 1
Flammability 2
Reactivity 0
Other N/A

HMIS Hazard Classification:

Health 1
Flammability 2
Reactivity 0
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



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



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



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: 1268
Packing Group: 111
ERG Number: 128
Label(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:



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.



Safety Data Sheet

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.

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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

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110-54-3	Hexane	0.5-4
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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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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)
OSHA: 800 ppm TWA; 1900 mg/m3 TWA
NIOSH: 800 ppm TWA; 1900 mg/m3 TWA

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

ACGIH: 100 ppm TWA
150 ppm STEL
OSHA: 100 ppm TWA; 435 mg/m3 TWA
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

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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: Eyes

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.

Safety Data Sheet

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SDS No. 9950

*** Section 9 - Physical & Chemical Properties ***

Appearance:	Translucent, straw-colored or light yellow	Odor:	Strong, characteristic aromatic hydrocarbon odor. Sweet-ether like
Physical State:	Liquid	pH:	ND
Vapor Pressure:	6.4 - 15 RVP @ 100 °F (38 °C) (275-475 mm Hg @ 68 °F (20 °C)	Vapor Density:	AP 3-4
Boiling Point:	85-437 °F (39-200 °C)	Melting Point:	ND
Solubility (H2O):	Negligible to Slight	Specific Gravity:	0.70-0.78
Evaporation Rate:	10-11	VOC:	ND
Percent Volatile:	100%	Octanol/H2O Coeff.:	ND
Flash Point:	-45 °F (-43 °C)	Flash Point Method:	PMCC
Upper Flammability Limit (UFL):	7.6%	Lower Flammability Limit (LFL):	1.4%
Burning Rate:	ND	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

Safety Data Sheet

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.

Safety Data Sheet

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.

Safety Data Sheet

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 <i>Alburnus alburnus</i>	119 mg/L [static]
96 Hr LC50 <i>Cyprinodon variegatus</i>	82 mg/L [static]
72 Hr EC50 <i>Pseudokirchneriella subcapitata</i>	56 mg/L
24 Hr EC50 <i>Daphnia magna</i>	170 mg/L

Toluene (108-88-3)

Test & Species	Conditions
96 Hr LC50 <i>Pimephales promelas</i>	15.22-19.05 mg/L [flow-through]
96 Hr LC50 <i>Pimephales promelas</i>	12.6 mg/L [static]
96 Hr LC50 <i>Oncorhynchus mykiss</i>	5.89-7.81 mg/L [flow-through]
96 Hr LC50 <i>Oncorhynchus mykiss</i>	14.1-17.16 mg/L [static]
96 Hr LC50 <i>Oncorhynchus mykiss</i>	5.8 mg/L [semi-static]
96 Hr LC50 <i>Lepomis macrochirus</i>	11.0-15.0 mg/L [static]
96 Hr LC50 <i>Oryzias latipes</i>	54 mg/L [static]
96 Hr LC50 <i>Poecilia reticulata</i>	28.2 mg/L [semi-static]
96 Hr LC50 <i>Poecilia reticulata</i>	50.87-70.34 mg/L [static]
96 Hr EC50 <i>Pseudokirchneriella subcapitata</i>	>433 mg/L
72 Hr EC50 <i>Pseudokirchneriella subcapitata</i>	12.5 mg/L [static]
48 Hr EC50 <i>Daphnia magna</i>	5.46 - 9.83 mg/L [Static]
48 Hr EC50 <i>Daphnia magna</i>	11.5 mg/L

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

Test & Species	Conditions
96 Hr LC50 <i>Pimephales promelas</i>	13.4 mg/L [flow-through]

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Material Name: Gasoline All Grades

SDS No. 9950

96 Hr LC50 Oncorhynchus mykiss	2.661-4.093 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	13.5-17.3 mg/L
96 Hr LC50 Lepomis macrochirus	13.1-16.5 mg/L [flow-through]
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

Conditions

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

Ethyl alcohol (64-17-5)

Test & Species

Conditions

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

Ethylbenzene (100-41-4)

Test & Species

Conditions

96 Hr LC50 Oncorhynchus mykiss	11.0-18.0 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	4.2 mg/L [semi-static]
96 Hr LC50 Pimephales promelas	7.55-11 mg/L [flow-through]
96 Hr LC50 Lepomis macrochirus	32 mg/L [static]
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 subcapitata	4.6 mg/L
96 Hr EC50 Pseudokirchneriella subcapitata	>438 mg/L
72 Hr EC50 Pseudokirchneriella subcapitata	2.6 - 11.3 mg/L [static]

Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

96 Hr EC50 Pseudokirchneriella subcapitata	1.7 - 7.6 mg/L [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 Poecilia reticulata	28.6 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 subcapitata	29 mg/L
48 Hr EC50 Daphnia magna	8.76 - 15.6 mg/L [Static]
48 Hr EC50 Daphnia magna	10 mg/L

Hexane (110-54-3)

Test & Species

Conditions

96 Hr LC50 Pimephales promelas	2.1-2.98 mg/L [flow-through]
24 Hr EC50 Daphnia magna	>1000 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.

Safety Data Sheet

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)

Safety Data Sheet

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

X

Chronic Health

X

Fire

X

Sudden Release of Pressure

--

Reactive

--

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.

Safety Data Sheet

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-trimethyl-	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

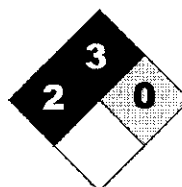
Component Analysis - Inventory

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
Reactivity	0



HMIS® Hazard Rating

Health	2	Moderate
Fire	3	Serious
Physical	0	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

Safety Data Sheet

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

SAFETY DATA SHEET

FOR INDUSTRIAL USE ONLY

GE5070

Section 1. Product and company identification

Product name : GE5070
Chemical name : Not available

**Manufacturer/Importer/
Distributor Information** : Momentive Amer Ind.
260 Hudson River Road
Waterford NY 12188

Contact person : 4information@momentive.com

Telephone : General information
+1-800-295-2392

**Emergency telephone number
Supplier** : CHEMTREC
1-800-424-9300

Section 2. Hazards identification

**Classification of the substance or
mixture** : SKIN SENSITIZATION - Category 1
TOXIC TO REPRODUCTION - Category 1B
TOXIC TO REPRODUCTION - Category 1B

GHS label elements

Hazard pictograms : 

Signal word : Danger

Hazard statements : H317 May cause an allergic skin reaction.
H360F May damage fertility.
H360 May damage the unborn child.

Precautionary statements

General : Not applicable.

Prevention : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
Wear protective gloves.
Avoid breathing dust.
Contaminated work clothing should not be allowed out of the workplace.

Response	: IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.
Storage	: Store locked up.
Disposal	: P501 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	: Uncured product is irritating to eyes, skin, and respiratory tract. Generates methanol during cure. Generates ammonia during cure.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Chemical name	: Not available

Hazardous ingredients	% by weight	CAS number
Distillates (petroleum), hydrotreated middle	5 - 10	64742-46-7
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-	1 - 5	999-97-3
Tin, dibutylbis(2,4-pentanedionato- κ O2, κ O4)-, (OC-6-11)-	0.1 - 1	22673-19-4

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

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is

conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

- | | | |
|--|---|---|
| Notes to physician | : | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Specific treatments | : | No specific treatment. |
| Protection of first aid personnel | : | No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- | | | |
|---|---|---|
| Suitable extinguishing media | : | Use dry chemical, CO ₂ , alcohol-resistant foam or water spray (fog). |
| Unsuitable extinguishing media | : | water jet |
| Specific hazards arising from the chemical | : | No specific fire or explosion hazard. |
| Hazardous thermal decomposition products | : | Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides
Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation. |
| Special protective actions for fire-fighters | : | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Use water spray to keep fire-exposed containers cool. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. |
| Special protective equipment for fire-fighters | : | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- | | | |
|------------------------------------|---|---|
| For non-emergency personnel | : | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary |
|------------------------------------|---|---|

- and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see section 8 of SDS). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

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

Section 9. Physical and chemical properties**Appearance**

- Physical state** : Solid
- Color** : White
- Odor** : ammonia
- Odor threshold** : Not available

pH	:	Not applicable.
Melting point	:	Not available
Boiling point	:	Not available
Flash point	:	93.3 °C (199.94 °F) (Estimated.)
Burning time	:	Not available
Burning rate	:	Not available
Evaporation rate	:	Not available
Flammability (solid, gas)	:	Not available
Lower and upper explosive (flammable) limits	:	Lower: Not available Upper: Not available
Vapor pressure	:	Not applicable.
Vapor density	:	Not available
Relative density	:	1.02
Solubility	:	PARTIAL IN TOLUENE
Solubility in water	:	Insoluble
Partition coefficient: n-octanol/water	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
SADT	:	Not available
Viscosity	:	Dynamic: Not available Kinematic: Not available
Volatile organic content	:	2.2 % (w/w) 27 g/l

Other information

No additional information.

Section 10. Stability and reactivity

Reactivity	:	Stable under normal conditions.
Chemical stability	:	The product is stable.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	No specific data.
Incompatible materials	:	No specific data.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information
--

Information on toxicological effects**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-				

	LD50 Oral	Rat	850 mg/kg	-
	LC50 Inhalation	Rat	9 mg/l	4 h

Conclusion/Summary : Not determined

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-	Skin - Severe irritant	Rabbit			-

Conclusion/Summary

Skin : Not determined

eyes : Not determined

Respiratory : Not determined

Sensitization

Conclusion/Summary

Skin : Not determined

Respiratory : Not determined

Mutagenicity

Conclusion/Summary : Not determined

Carcinogenicity

Conclusion/Summary : Not determined

Reproductive toxicity

Conclusion/Summary : Not determined

Teratogenicity

Conclusion/Summary : Not determined

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Tin, dibutylbis(2,4-pentanedionato- κ .O2, κ .O4)-, (OC-6-11)-	Category 1		thymus

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Tin, dibutylbis(2,4-pentanedionato- κ .O2, κ .O4)-, (OC-6-11)-	Category 1		thymus

Aspiration hazard

Product/ingredient name	Result
Distillates (petroleum), hydrotreated middle	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of : Not available

exposure**Potential acute health effects**

Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact	:	May cause an allergic skin reaction.
Ingestion	:	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

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

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

Potential immediate effects	:	Not available
Potential delayed effects	:	Not available

Long term exposure

Potential immediate effects	:	Not available
Potential delayed effects	:	Not available

Potential chronic health effects

Conclusion/Summary	:	Not determined
General	:	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	May damage the unborn child.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	May damage fertility.

Numerical measures of toxicity**Acute toxicity estimates**

Not available

Section 12. Ecological information

Ecotoxicity

Conclusion/Summary : Not available

Persistence/degradability

Conclusion/Summary : Not available

Bioaccumulative potential

Product/ingredient name	Species	Exposure	LogPow	BCF	Potential
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-			1.19	-	low

Mobility in soil

Soil/water partition coefficient (KOC) : Not available

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

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

Section 14. Transport information

Special precautions for user : This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.

15. Regulatory information

United States

U.S. Federal regulations : **United States - TSCA 12(b) - Chemical export notification:** None required.
United States - TSCA 5(a)2 - Final significant new use rules: Not listed
United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed
United States - TSCA 5(e) - Substances consent order: Not listed

SARA 311/312

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

California Prop. 65: : WARNING: This product contains a chemical known to the State of California to cause cancer., WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada

WHMIS (Canada) : Class D-2A: Material causing other toxic effects (Very toxic).
 Class D-2B: Material causing other toxic effects (Toxic).

International regulations

International lists : **Australia inventory (AICS):** All components are listed or exempted.
Canada inventory: All components are listed or exempted.
Japan inventory: Not determined.
China inventory (IECSC): All components are listed or exempted.
Korea inventory: All components are listed or exempted.
New Zealand Inventory (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
United States inventory (TSCA 8b): All components are listed or exempted.
Taiwan inventory (CSNN): All components are listed or exempted.

Section 16. Other information

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

Health	2
Flammability	1
Physical hazards	0

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

Full text of abbreviated H : Not applicable.

statements**History**

Date of printing	:	04/20/2015
Date of issue/Date of revision	:	04/10/2015
Date of previous issue	:	03/19/2015
Version	:	1.2
Prepared by	:	Product Safety Stewardship
Key to abbreviations	:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations
References	:	Not available

Notice to reader

Unless otherwise specified in section 1, Momentive Products are intended for industrial application only. They are not intended for specific medical applications, neither for long-lasting (> 30 days) implantation into the human body, injected or directly ingested, nor for the manufacture of multiple usable contraceptives. Keep out of the reach of children.

Further Information

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.

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Section 1 Chemical Product and Company Identification

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PO Box 92912
Rochester, NY 14692-9012
Tel: (800) 962-2660

Boreal Science
399 Vansickle Road
St. Catharines, 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 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: 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.

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Gelatin	9000-70-8	100%	232-554-6

Section 4 First Aid Measures

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.

Section 5 Fire Fighting Measures

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

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.

Section 6 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: Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Page E2 of E2

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 Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
	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/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Solid, off-white powder.	Evaporation rate (= 1): Data not available	Partition coefficient: Data not available
Odor: No odor.	Flammability (solid/gas): Data not available.	Auto-ignition temperature: Data not available
Odor threshold: Data not available.	Explosion limits: Lower / Upper: Data not available	Decomposition temperature: Data not available
pH: Data not available	Vapor pressure (mm Hg): Negligible	Viscosity: Data not available.
Melting / Freezing point: Decomposes	Vapor density (Air = 1): Data not available	Molecular formula: Natural product
Boiling point: Decomposes	Relative density (Specific gravity): >1.0	Molecular weight: Mixture
Flash point: Data not available	Solubility(ies): Insoluble in cold water, soluble in boiling water	

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures and heat.

Incompatible materials: Strong oxidizers.

Hazardous decomposition products: Carbon oxides and nitrogen oxides.

Section 11 Toxicological Information

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
Carcinogenicity: 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

Section 12 Ecological Information

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.

Section 13 Disposal Information

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.

Section 14 Transport Information (DOT/ICAO/Canada TDG)

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

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	CERCLA (RQ)	RCRA code	DSL	NDSL
Gelatin	Listed	Not listed	Not listed	Listed	Not listed

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.

Product Number: 053AF
Issuing Date: May 11, 2015

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe
Revision Date: None
Revision Number: 0



VI·JON®

Safety Data Sheet



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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: 314-427-1010

Supplier Email info@vijon.com

Emergency telephone number Chemtrec: 1-800-424-9300 (24-Hour)



Product Number: 053AF
Issuing Date: May 11, 2015

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,
Pale Green, Slightly Viscous Liquid

Physical State: Slightly Viscous Liquid

Odor: Floral, Alcohol

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

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

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 Number: 053AF
Issuing Date: May 11, 2015

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe
Revision Date: None
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	*
Isopropyl 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 Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

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 Number: 053AF
Issuing Date: May 11, 2015

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe
Revision Date: None
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 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm 10% LEL TWA: 1000 ppm TWA: 1900 mg/m ³
Glycerin 56-81-5	TWA: 10 mg/m ³ mist	TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction (vacated) TWA: 10 mg/m ³ 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 Number: 053AF
Issuing Date: May 11, 2015

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe
Revision Date: None
Revision Number: 0

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Slightly Viscous Liquid	Odor	Floral, Alcohol
Appearance	Clear to Slightly Hazy, Pale Green, Slightly Viscous Liquid	Odor Threshold	No information available
Color	Pale Green		
<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	7.0	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	No data available	None known	
Flash Point	23 C / 73 F	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	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/water	No data available	None known	
Autoignition temperature	No data available	None known	
Decomposition temperature	No data available	None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity	No data available	None known	
Explosive properties	No data available		
Oxidizing Properties	No data available		
<u>Other Information</u>			
Softening Point	No data available		
VOC Content (%)	No data available		
Particle Size	No data available		
Particle Size Distribution	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.



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 64-17-5	-	-	= 124.7 mg/L (Rat) 4 h
Glycerin 56-81-5	-	> 10 g/kg (Rabbit)	-
Isopropyl Myristate 110-27-0	> 10000 mg/kg (Rat)	= 5 g/kg (Rabbit)	> 41 mg/L (Rat)
Water 7732-18-5	> 90 mL/kg (Rat)	-	-

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 64-17-5	A3	Group 1	Known	X
FD&C Blue No. 1 3844-45-9		Group 3		

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 No information available.

STOT - single exposure 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

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 Number	127

TDG

UN-No.	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	III
Description	UN1170, ETHANOL, 3, III

MEX

UN-No.	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	III
Description	UN1170, ETHANOL, 3, III

ICAO

UN-No.	UN1170
Proper Shipping Name	ETHANOL SOLUTION
Hazard Class	3
Packing Group	III
Description	UN1170, ETHANOL SOLUTION, 3, III

IATA

UN-No.	UN1170
Proper Shipping Name	ETHANOL SOLUTION
Hazard Class	3
Packing Group	III
Description	UN1170, ETHANOL SOLUTION, 3, III



Product Number: 053AF
Issuing Date: May 11, 2015

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

RID

UN-No.	UN1170
Proper Shipping Name	ETHANOL SOLUTION
Hazard Class	3
Packing Group	III
Classification code	F1
Description	UN1170, ETHANOL SOLUTION, 3, III

ADR

UN-No.	UN1170
Proper Shipping Name	ETHANOL SOLUTION
Hazard Class	3
Packing Group	III
Classification code	F1
Tunnel restriction code	(D/E)
Description	UN1170, ETHANOL SOLUTION, 3, III

ADN

UN-No.	UN1170
Proper Shipping Name	ETHANOL SOLUTION
Hazard Class	3
Packing Group	III
Classification code	F1
Special Provisions	144, 601
Description	UN1170, ETHANOL SOLUTION, 3, III
Hazard Labels	3
Limited Quantity	5 L
Ventilation	VE01

Product Number: 053AF
Issuing Date: May 11, 2015

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe
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 64-17-5		X			
Carbomer 9003-01-4	X				
Glycerin 56-81-5	X	X	X	X	

International Regulations

Mexico

National occupational exposure limits

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

Mexico - Occupational Exposure Limits - Carcinogens

Canada

WHMIS Hazard Class

B2
D2A



Product Number: 053AF
Issuing Date: May 11, 2015

Product Name: Germ-X Hand Sanitizer with Vitamin E and Aloe
Revision Date: None
Revision Number: 0

16. OTHER INFORMATION

NFPA	Health Hazards	1	Flammability	3	Instability	0	Physical and Chemical Hazards	-
HMIS	Health Hazards	1	Flammability	3	Physical Hazard	0	NONE	
							Personal Protection	X

Prepared By WERCS Professional Services, LLC
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date May 11, 2015

Revision Date None

Revision Note 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.

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End of Safety Data Sheet



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)



Signal word: Warning

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 °C <1.0g/ml
 Flash Point > or = 23 °C or 73.4°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
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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

1. Identification

Product number 1000000075
Product identifier **GLASS CLEANER**
Revision date 05-30-2015
Company information Sprayway, Inc.
1005 S. Westgate Drive
Addison, IL 60101 United States
Company phone General Assistance 1-630-628-3000
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 02
Supersedes date 05-26-2015
Recommended use cleaner
Recommended restrictions None known.

2. Hazard(s) identification

Physical hazards Gases under pressure Liquefied gas
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements



Signal word Warning
Hazard statement Contains gas under pressure; may explode if heated.
Precautionary statement
Prevention Observe good industrial hygiene practices.
Response Wash hands after handling.
Storage Protect from sunlight. Store in a well-ventilated place.
Disposal Dispose of waste and residues in accordance with local authority requirements.
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			90 - 100

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

4. First-aid measures

Inhalation	Move to fresh air. 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.
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	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contents under pressure. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	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	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	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 SDS.
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.
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**Conditions for safe storage,
including any incompatibilities**

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 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	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	Type	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 Chemical Hazards

Components	Type	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 - Tennessee 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.

Individual protection measures, such as personal protective equipment

Eye/face protection	If contact is likely, safety glasses with side shields are recommended.
Hand protection	For prolonged or repeated skin contact use suitable protective gloves.
Skin protection	
Other	Wear suitable protective clothing.
Respiratory protection	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an 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.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Clear.
Physical state	Gas.
Form	Aerosol. Liquefied gas.
Color	Light yellow.
Odor	Characteristic.
Odor threshold	Not available.
pH	9.1 - 10.1 estimated
Melting point/freezing point	Not available.
Initial boiling point and boiling range	212 °F (100 °C) estimated
Flash point	-156.0 °F (-104.4 °C) Propellant estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	80 - 100 psig @70F estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Aerosol spray enclosed space	
Deflagration density	> 2.52 g/cm3 Tested
Aerosol spray ignition distance	< 15 cm Tested estimated
Specific gravity	0.977 - 0.997

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.

Components	Species	Test Results
2-Butoxyethanol (CAS 111-76-2)		
Acute		
Dermal		
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
	Rat	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 may 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 - repeated exposure Not classified.

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

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

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	Species		Test Results
GLASS CLEANER (CAS 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 promelas)	> 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)

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

Mobility in soil No data available.

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

13. Disposal considerations

Disposal instructions	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
UN proper shipping name	Aerosols
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

Transport hazard class(es)	
Class	2.2
Subsidiary risk	-
Label(s)	2.2
Packing group	Not applicable.
Environmental hazards	No.
ERG Code	2L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	

Passenger and cargo aircraft	Allowed.
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Cargo aircraft only	Allowed.
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Packaging Exceptions	LTD QTY
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IMDG

UN number	UN1950
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UN proper shipping name	AEROSOLS
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Transport hazard class(es)	
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Class	2.2
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Subsidiary risk	-
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Label(s)	2.2
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Packing group	Not applicable.
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Environmental hazards	
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Marine pollutant	No.
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EmS	Not available.
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Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
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Packaging Exceptions	LTD QTY
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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
--	-----------------

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.

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 chemical	No
--	----

SARA 313 (TRI reporting)

Not regulated.

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

Not regulated.

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

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA)	Not regulated.
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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	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	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

Country(s) or region	Inventory name	On inventory (yes/no)*
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

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

Issue date	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



MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

Product Line	Sulyn
Product Name	Glitter, Fairy Sparkles, Fairy Dust
Synonyms, Trade Name, Chemical Name	48 Gauge Metallized & Color Lacquered Polyester, Metallized Mylar or 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

** No Heavy Metals as defined in CONEG LEGISLATION

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.

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 CFR 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/m ³ .
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, Terephthalic 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: Not available

Upper/lower flammable limits: Not applicable

Upper/lower Explosive limits: Not applicable

Flash Point: 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: Lead Free Gloss Glazes

PRODUCT CODE: LG Series (1)

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

Section I - Product Identification

Product Name: Gloss Glazes Product Class: Ceramic Glazes Product Size: 16 oz., 1 lb., gal

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

Reportable Components	CAS#	Vapor Pressure Mm Hg @ Temp	Weight Percent
Water	7732-18-5		
Sod. Borosilicate Frit	65997-18-4		
Clay	1332-58-7		
Inorganic Stains	Mixture		
Gum	9004-32-4		

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	Specific Gravity (H2O=1): Less than 2
Vapor Density: Heavier than air.	Evaporation Rate: N/A
Coating V.O.C.: N/A	Material V.O.C.: N/A
Appearance and Odor: Liquid / Dry	

Section IV - Fire and Explosion Hazards Data

Flash Point: N/A	Method Used: N/A
Flammable limits In Air by Volume: NA - Lower	NA - Upper:
Extinguishing Media: N/A	Special Firefighting Procedures: No fire hazards.
Unusual Fire and Explosion Hazards: None.	

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.

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)

Manufacturer's Name: American Art Clay Co., Inc.
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 Mm Hg @ Temp	Weight 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	Specific Gravity (H2O=1): Less than 2.
Vapor Density: Heavier than air.	Evaporation Rate: NA
Coating V.O.C.: NA	Material V.O.C.: NA
Appearance and Odor: Liquid	

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: 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.

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

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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

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

Section I – Product Identification

Product Name: Gloss Glazes
(Copper)

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 @ 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	65997-18-4		
Clay	1332-58-7		
Flint	14808-60-7		

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

Section III- Physical / Chemical Characteristics

Boiling Range: NA

Specific Gravity (H2O=1): Less than 2

Vapor Density: Heavier than air.

Evaporation Rate: NA

Coating V.O.C.: 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.

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

The Valspar Corporation

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification

Product ID: 027.0008010.076
Product Name: GLOSS POLY SPR 6U
Product Use: Paint or Coatings Related Product
Print date: 22/Nov/2006
Revision Date: 22/Nov/2006

Company Identification

The Valspar Corporation - Architectural Coatings Division
1000 Lake Road
Medina, OH 44256
Manufacturer's Phone: 1-330-725-4511

24-Hour Medical Emergency Phone: 1-888-345-5732

2. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

Common Name CAS-No.	Approx. Weight %	Chemical name
DIMETHYL KETONE 67-64-1	35 - 40	ACETONE
PROPANE 74-98-6	15 - 20	Propane
MINERAL SPIRITS 8052-41-3	10 - 15	Stoddard solvent
BUTANE 106-97-8	5 - 10	Butane
AROMATIC NAPHTHA, LIGHT 64742-95-6	1 - 5	Petroleum naphtha, light aromatic
ETHYL 3- ETHOXYPROPIONATE 763-69-9	1 - 5	Ethyl 3-ethoxypropionate
1,2,4-TRIMETHYLBENZENE 95-63-6	1 - 5	PSEUDO CUMENE

If this section is blank there are no hazardous components per OSHA guidelines.

3. HAZARDS IDENTIFICATION

Primary Routes of Exposure:

Inhalation
Ingestion
Skin absorption

Emergency Overview:

This section not in use.

This product contains ingredients that may contribute to the following potential acute health effects:

Inhalation Effects:

Harmful if inhaled. May affect the brain, nervous system, or respiratory system, causing dizziness, headache, nausea or respiratory irritation.

Eye Contact:

Causes eye irritation.

Skin Contact:

May cause moderate skin irritation.

Acute Ingestion:

None known

Other Effects:

May cause kidney damage. May cause liver damage.

This product contains ingredients that may contribute to the following potential chronic health effects:

Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Prolonged and/or repeated contact can result in skin irritation. May cause skin drying with prolonged exposure.

See Section 11 for toxicological information about Mutagens, Teratogens and Carcinogens.

If this section is blank, no information is available.

4. FIRST AID MEASURES

Inhalation:

If affected by inhalation, move victim to fresh air. If symptoms persist, seek medical attention.

Eye Contact:

In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Skin Contact:

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. If irritation persists get medical attention. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean contaminated shoes.

Ingestion:

If swallowed, contact medical personnel immediately to determine best course of action.

Medical conditions aggravated by exposure: Any respiratory or skin condition.

5. FIRE FIGHTING MEASURES

Flash point (Fahrenheit):

-31° F (-35° C) TCC/PM

Lower explosive limit:

1 %

Upper explosive limit:

13 %

Autoignition temperature:

Not available. ° F (° C)

Sensitivity to impact:

No.

Sensitivity to static discharge:

Subject to static discharge hazards. Please see bonding and grounding information in Section 7.

See Section 10.

Hazardous combustion products:

Unusual fire and explosion hazards:

None known.

Extinguishing media:

Carbon dioxide, dry chemical, foam and/or water fog.

Fire fighting procedures:

Use water spray to cool nearby containers and structures exposed to fire.

6. ACCIDENTAL RELEASE MEASURES**Action to be taken if material is released or spilled:**

Ventilate area. Avoid breathing of vapors. Use self-containing breathing apparatus or airmask for large spills in a confined area. Wipe, scrape or soak up in an inert material and put in a container for disposal. See section 5, "Unusual Fire and Explosion Hazards", for proper container and storage procedures. Remove sources of ignition. Remove with inert absorbent and non sparking tools. Avoid contact with eyes.

7. HANDLING AND STORAGE**Precautions to be taken in handling and storage:**

Keep away from heat, sparks, and flames. Keep container closed when not in use. Do not store above 120 degrees F. (49 degrees C). Based on flash point and vapor pressure, suitable storage should be provided in accordance with OSHA regulation 1910.106, Ontario OH&S regulation 851 section 22. Empty containers may contain product residue, including flammable or explosive vapors. Do not cut, puncture or weld on or near container. All label warnings must be observed until the container has been commercially cleaned or reconditioned. If the product is used near or above the flashpoint, an ignition hazard may be present. Activities, uses, or operations which liberate vapor (such as mixing or free fall of liquids) may also present an ignition hazard. Please ensure containers and other interconnected equipment are properly bonded and grounded at all times.

8. PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE CONTROLS**Personal Protective Equipment****Eye and face protection:**

Avoid contact with eyes. Wear chemical goggles if there is the possibility of contact or splashing in the eye.

Skin protection:

Appropriate chemical resistant gloves should be worn. To prevent skin contact wear protective clothing covering all exposed areas.

Respiratory protection:

If exposure cannot be controlled below applicable limits, use the appropriate NIOSH approved respirator such as an air purifying respirator with organic vapor cartridge and dust/mist filter. Consult the respirator manufacturer's literature to ensure that the respirator will provide adequate protection. Read and follow all respirator manufacturer's instructions.

Ventilation

Required when spraying or applying in confined area. Ventilation equipment should be explosion proof. Eliminate ignition sources.

Exposure Guidelines**OSHA Permissible Exposure Limits (PEL's)**

Common Name CAS-No.	Approx. Weight %	TWA (final)	Ceilings limits (final)	Skin designations
DIMETHYL KETONE 67-64-1	35 - 40	2400 mg/m ³ 1000 ppm		
PROPANE 74-98-6	15 - 20	1800 mg/m ³ 1000 ppm		
MINERAL SPIRITS 8052-41-3	10 - 15	2900 mg/m ³ 500 ppm		

ACGIH Threshold Limit Value (TLV's)

Common Name CAS-No.	Approx. Weight %	TWA	STEL	Ceiling limits	Skin designations
DIMETHYL KETONE 67-64-1	35 - 40	500 ppm	750 ppm		
PROPANE 74-98-6	15 - 20	1000 ppm			
MINERAL SPIRITS 8052-41-3	10 - 15	100 ppm			
BUTANE 106-97-8	5 - 10	1000 ppm			
1,2,4-TRIMETHYLBENZENE 95-63-6	1 - 5	25 ppm			

If this section is blank, no information is available.

9. PHYSICAL PROPERTIES

Odor:	Normal for this product type.
Physical State:	Liquid
pH:	Not determined.
Vapor pressure:	NOT DETERMINED mmHG @ 68° F (20° C)
Vapor density (air = 1.0):	5
Boiling point:	-42° F (-41° C)
Solubility in water:	Not determined.
Coefficient of water/oil distribution:	Not determined.
Density (lbs per US gallon):	6.05
Specific Gravity	.73
Evaporation rate (butyl acetate = 1.0):	5.6

10. STABILITY AND REACTIVITY

Stability	Stable
Conditions to Avoid:	None known.
Incompatibility:	Strong oxidizers.
Hazardous Polymerization:	None anticipated.
Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.

Sensitivity to static discharge:

Subject to static discharge hazards. Please see bonding and grounding information in Section 7.

11. TOXICOLOGICAL INFORMATION

Mutagens:

Teratogens:

Carcinogens:

If this section is blank, no information is available.

12. ECOLOGICAL DATA

Not available at this time.

13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation

Proper Shipping Name: CONSUMER COMMODITY ORM-D
UN ID Number: CONCOM

49 CFR Hazardous Material Regulations Parts 100-180

The supplier will apply the combustible liquid exception in 49 CFR 173.150(f), limited quantity or "does not sustain combustion" exceptions and consumer commodity rules, when authorized. Please check 49 CFR Parts 100-180 to determine if the use of these exceptions applies to your shipments when re-shipping our products.

International Air Transport Association:

Proper Shipping Name: AEROSOLS, FLAMMABLE
Hazard Class: 2.1
UN ID Number: UN1950

International Maritime Organization:

Proper Shipping Name: AEROSOLS
Hazard Class: 2
Non-Bulk UN ID Number: UN1950

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

Common Name CAS-No.	Approx. Weight %	SARA 302	SARA 313	CERCLA RQ in lbs.
DIMETHYL KETONE 67-64-1	35 - 40			5000
1,2,4-TRIMETHYLBENZENE 95-63-6	1 - 5		form R reporting required for 1.0% de minimis concentration	

SARA 311/312 Hazard Class:

Acute: Yes
Chronic: Yes
Flammability: Yes
Reactivity: No
Sudden Pressure: Yes

U.S. STATE REGULATIONS:

Pennsylvania Right To Know:

BUTANE
AROMATIC NAPHTHA, LIGHT
DIMETHYL KETONE
PROPANE
ETHYL 3-ETHOXYPROPIONATE
MINERAL SPIRITS
1,2,4-TRIMETHYLBENZENE

106-97-8
64742-95-6
67-64-2
74-98-6
763-69-9
8052-41-3
95-63-6

Additional Non-Hazardous Materials

SUPPLIER TRADE SECRET

Trade Secret

Rule 66 status of product

Photochemically reactive.

INTERNATIONAL REGULATIONS - Chemical Inventories**TSCA Inventory:**

All components of this product are in compliance with U.S. TSCA Chemical Substance Inventory Requirements.

Canada Domestic Substances List:

All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION**HMIS Codes**

Health: 2
Flammability: 4
Reactivity: 1
PPE:

X - See Section 8 for Personal Protective Equipment (PPE).

Abbreviations:

OSHA - Occupational Safety and Health Administration, IARC - International Agency for Research on Cancer, NIOSH - National Institute of Occupational Safety and Health, NTP - National Toxicology Program, ACGIH - American Conference of Governmental Industrial Hygienists, SCAQMD - South Coast Air Quality Management District, TSCA - Toxic Substances Control Act, IATA - International Air Transport Association, IMO - International Maritime Organization, DOT - Department of Transportation, NA - Not applicable, NOT ESTAB - Not established, N.A.V. - Not available, RQ - Reportable quantity, WT - Weight, MG/CU M - Milligrams per cubic meter, G/L - Grams per liter, MM - Millimeters, MPPCF - Millions of particles per cubic foot, PPM - parts per million, PPT - parts per thousand, TCC/PM - Tag closed cup / Pensky-Martens, PB - Lead, PEL - Permissible exposure level, TWA - Time Weighted Average, STEL - Short term exposure limit, C - Celsius, F - Fahrenheit.

Disclaimer:

The data on this sheet represent typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. Valstar assumes no obligation or liability for use of this information. UNLESS VALSPAR AGREES OTHERWISE IN WRITING, VALSPAR MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. VALSPAR WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Your only remedy for any defect in this product is the replacement of the defective product, or a refund of its purchase price, at our option. This MSDS contains additional information required by the state of Pennsylvania.

Section 1 Chemical Product and Company Information

5100 West Henrietta Rd
PO Box 92912
Rochester, NY 14692-9012
Tel: (800) 962-2660

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

Product GLUCOSE, 0.1% SOLUTION

Synonyms Dextrose, Water Solution

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: 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.

Section 3 Composition / Information on Ingredients

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

Section 4 First Aid Measures

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.

Section 5 Accidental Release Response

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 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 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.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	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/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid.	Evaporation rate (Water = 1): <1	Partition coefficient: Data not available
Odor: No odor.	Flammability (solid/gas): Data not available.	Auto-ignition temperature: Data not available
Odor threshold: Data not available.	Explosion limits: Lower / Upper: Data not available	Decomposition temperature: Data not available.
pH: Data not available.	Vapor pressure (mm Hg): 14 (water)	Viscosity: Data not available.
Melting / Freezing point: Approximately 0°C (32°F) (water)	Vapor density (Air = 1): 0.7 (water)	Molecular formula: Mixture
Boiling point: Approximately 100°C (212°F) (water)	Relative density (Specific gravity): Approximately 1.0 (water)	Molecular weight: Mixture
Flash point: Data not available	Solubility(ies): Complete in water.	

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.

Section 11 Toxicological Information

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

Carcinogenicity: 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.

Section 12 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.

Section 13 Other Information

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

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERCLA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Dextrose	Listed	Not listed	Not listed	Listed	Not listed	Uncontrolled product

Section 14 Additional 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: March 20, 2014

Supersedes: March 20, 2014

Revision Date: 15-Sept-2015

Item Number(s): 209505, 209514, 209701

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

Product identifier

Product name GOLDEN HARVEST® UNIVERSAL WHEAT WALLPAPER PASTE / WALL SIZE

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Adhesive - Construction, Wallcovering

Uses advised against See Technical Data Sheet

Details of the supplier of the safety data sheet

Supplier name Roman Decorating Products, LLC

Supplier address 824 State Street
Calumet City, IL
60409
US

Supplier phone number Phone: 708-891-0770
Fax: 708-891-4746

Supplier e-mail technicalhelp@romandec.com

Emergency telephone number

Company emergency phone number 708-891-0770

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

GHS Label elements, including precautionary statements**Emergency Overview**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance White

Physical state Solid/Powder

Odor Dry powder

Precautionary Statements - Prevention

Obtain special instructions before use.

Precautionary Statements - Response

None

Precautionary Statements - Storage

None

Precautionary Statements - Disposal

None

Hazards not otherwise classified (HNOC)

Not applicable

Unknown toxicity

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

Other information

May cause slight eye irritation.

Interactions with other chemicals

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First aid measures****Eye contact**

Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

Skin contact

Wash with soap and water.

Inhalation

Remove to fresh air.

Ingestion

Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Most important symptoms and effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the 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

Carbon oxides.

Explosion data

Sensitivity to mechanical impact No

Sensitivity to static discharge No

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 eyes.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8.

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

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Storage Do not freeze. Keep container tightly closed.

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 No special protective equipment required.

Skin and body protection No special protective equipment required.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Solid/Powder	Odor	Dry powder
Appearance	White	Odor threshold	No information available
Color	White		
<u>Property</u>	<u>Values</u>		
pH	Not applicable		
Melting / freezing point	Not applicable		
Boiling point / boiling range	Not applicable		
Flash point	Not applicable		
Evaporation rate	Not applicable		
Flammability (solid, gas)	No data available		

Flammability limit in air	
Upper flammability limit	Not applicable
Lower flammability limit	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Specific gravity	Not applicable
Water solubility	Miscible in water
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	Not applicable
Autoignition temperature	Not applicable
Decomposition temperature	Not applicable
Kinematic viscosity	Not applicable
Dynamic viscosity	Not applicable
Explosive properties	Not applicable
Oxidizing properties	Not applicable
Softening point	Not applicable
VOC content (actual)	Not applicable
Particle size	No data available
Particle size distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

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

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product information

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

Component information

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 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.

12. ECOLOGICAL INFORMATIONEcotoxicity

The environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONSWaste treatment methods

Disposal methods Dispose of contents/containers in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT
Proper shipping name NOT REGULATED
Hazard class NON REGULATED
N/A

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA
Proper shipping name Not regulated
Hazard class NON REGULATED
N/A

IMDG/IMO
Hazard class Not regulated
N/A

<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

International inventories

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US state regulations

California proposition 65

This product does not contain any Proposition 65 chemicals.

16. OTHER INFORMATION

NFPA	Health Hazards	0	Flammability	0	Instability	0	Physical and Chemical Hazards
HMIS	Health Hazards	0	Flammability	0	Physical Hazard	0	Personal Protection X

Prepared By	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
Revision Date	15-Sept-2015
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

SAFETY DATA SHEET

Goof Off Heavy Duty

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
Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113
Phone Number: (901)775-0100
Web site address: www.wmbarr.com
Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346
Information: W.M. Barr Customer Service (800)398-3892
Intended Use: Multi-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.

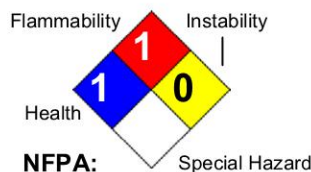
GHS Response Phrases: P302+352: IF ON SKIN: Wash with plenty of soap and water.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.
P321: Specific treatment 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:

HEALTH	*	1
FLAMMABILITY		1
PHYSICAL		0
PPE		X

HMIS:



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

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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 {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}}	< 5.0 %	KJ9100000

Additional Chemical Information

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

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4. FIRST AID MEASURES

Emergency and First Aid Procedures:	<p>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.</p> <p>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.</p> <p>Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.</p> <p>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.</p>
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-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 Setafash 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.
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7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	<p>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.</p> <p>Follow all MSDS/label precautions even after container is emptied because they may retain product residues.</p>
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.

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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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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: ☐ Gas ☒ Liquid ☐ Solid
Appearance and Odor: Clear, thin, colorless to light yellow liquid.
Melting Point: 32.00 F
Boiling Point: 212.00 F
Autoignition Pt: No data.
Flash Pt: No data.
Explosive Limits: LEL: No data. UEL: No data.
Specific Gravity (Water = 1): 1.0022
Density: 8.34 LB/GL
Vapor Pressure (vs. Air or mm Hg): No data.
Vapor Density (vs. Air = 1): > 1
Evaporation Rate: > 1
Solubility in Water: Complete
pH: 6.5 - 7.5
Percent Volatile: 92.0 % by weight.
VOC / Volume: 9.0000 % WT

10. STABILITY AND REACTIVITY

Stability: Unstable ☐ Stable ☒
Conditions To Avoid - Instability: None known.
Incompatibility - Materials To Avoid: Strong alkalies, acids, and oxidizers.
Hazardous Decomposition Or Byproducts: Carbon monoxide, carbon dioxide
Possibility of Hazardous Reactions: Will occur ☐ Will not occur ☒
Conditions To Avoid - Hazardous Reactions: None known.

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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 Information: Product has not been tested as a whole.

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. 304 RQ	S. 313 (TRI)
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	No
112-34-5	Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}}	No	No	Yes-Cat. N230

This material meets the EPA ☒ Yes ☐ No Acute (immediate) Health Hazard

'Hazard Categories' defined ☒ Yes ☐ No Chronic (delayed) Health Hazard

for SARA Title III Sections ☐ Yes ☒ No Fire Hazard

311/312 as indicated: ☐ Yes ☒ No Sudden Release of Pressure Hazard

☐ Yes ☒ No Reactive Hazard

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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 Statement:

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

16. OTHER INFORMATION

Revision Date: 05/04/2015

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

Additional Information About This Product: No data available.

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 - Gorilla Kids Disappearing Purple Glue Sticks

Date Revised: NEW
Date Issued: 10/4/18

Version: 1.0

FOR CHEMICAL EMERGENCY:

During Business Hours: (800) 966-3458 | Outside Business Hours: (800) 420-7186

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: IDENTIFICATION

Product Identifier

Product Name: Gorilla Kids Disappearing Purple Glue Sticks

Synonyms:

Intended Use of the Product

School glue stick intended for general projects conducted by children under the age of 12 years old.

Name, Address, and Telephone of the Responsible Party

Company

The Gorilla Glue Company
2101 E. Kemper Road
Cincinnati, Ohio 45241
513-271-3300

www.gorillatough.com

Emergency Telephone Number

Emergency number : 1-800-420-7186 (Prosar)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US) Not Classified

Label Elements

GHS-US Labeling No labeling applicable

Other Hazards

Other Hazards: Not available

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Non-hazardous mixture	N/A	100	N/A

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

Inhalation: If adverse effects occur, move to fresh air. If you feel unwell, seek medical advice.

Skin Contact: Gently wash with plenty of soap and water. If adverse effects occur, seek medical advice.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do not induce vomiting. Call a POISON CENTER or doctor/physician for treatment advice.

Most Important Symptoms and Effects Both Acute and Delayed

General: None expected under normal conditions of use.

Inhalation: None expected under normal conditions of use.

Skin Contact: None expected under normal conditions of use.

Eye Contact: None expected under normal conditions of use.

Ingestion: None expected under normal conditions of use.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.



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According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: For the dry polymer, use alcohol resistant foam, carbon dioxide or dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Do not allow run-off from fire fighting to enter drains or water courses.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Oxides of aluminum. Chlorine gas.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Contaminated surfaces will become very slippery.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Absorb and/or contain spill with inert material, then place in suitable container.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry. Dispose of in accordance with local, state, territorial, provincial, federal and international regulations.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Handling Temperature: > 10 °C (50 °F)

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

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

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Maximum Storage Period: Varies depending on storage conditions. For best results, protect from frost and do not store in heat or direct sunlight. Keep tightly sealed and between temperatures 10 and 35°C (50 and 95°F).



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According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

There are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Not necessary under normal conditions.

Materials for Protective Clothing: Not necessary under normal conditions.

Hand Protection: Not necessary under normal conditions.

Eye Protection: Not necessary under normal conditions.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Not necessary under normal conditions.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Purple
Odor	: Not Available
Odor Threshold	: Not available
pH	: 10.5
Relative Evaporation Rate (butylacetate=1)	: Not available
Melting/Freezing Point	: Not available
Boiling Point	: 100°C
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Upper and Lower Flammable Limits	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Specific Gravity/Relative Density	: 1.05
Solubility	: Not available
Partition coefficient: n-octanol/water	: Not available
Viscosity, Dynamic	: Not Available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.



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SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂). Oxides of aluminum. Chlorine.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: None expected under normal conditions of use.

Symptoms/Injuries After Skin Contact: None expected under normal conditions of use.

Symptoms/Injuries After Eye Contact: None expected under normal conditions of use.

Symptoms/Injuries After Ingestion: None expected under normal conditions of use.

Chronic Symptoms: Not applicable

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

SECTION 12: ECOLOGICAL INFORMATION

Toxicity The components of this material have been reviewed in various sources and no selected endpoints have been identified.

Persistence and Degradability Not available

Bioaccumulative Potential Not available

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Sewage Disposal Recommendations: Do not dispose of waste into sewer.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT Not regulated for transport

In Accordance with IMDG Not regulated for transport

In Accordance with IATA Not regulated for transport

In Accordance with TDG Not regulated for transport



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According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

US State Regulations

Neither this product nor its chemical components appear on any US state lists.

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 10/4/2018

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

N/A	N/A
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Party Responsible for the Preparation of This Document

The Gorilla Glue Company
+1 513-271-3300

The information presented in this Safety Data Sheet was prepared by qualified personnel and to the best of our knowledge is true and accurate. The information and recommendations are furnished for this product with the understanding that the purchaser will independently determine the suitability of the product for this purpose. This data does not constitute a warranty, expressed or implied, statutory or otherwise, nor is it representation for which The Gorilla Glue Company assumes legal responsibility. The data is submitted for the user's information and consideration only. Any use of this product must be determined by the user to be in accordance with applicable federal, state, provincial and local laws and regulations.

North America GHS US 2012 & WHMIS

Safety Data Sheet

Graphite Powder

CAROLINA[®]
www.carolina.com

Section 1

Product Description

Product Name: Graphite Powder
Recommended Use: Science education applications
Synonyms: Graphite, Natural; Carbon, Black Lead
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

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

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	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Vapor Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3

Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Graphite Powder	7782-42-5	100

Section 4

First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Eyes: 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.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

Section 5

Firefighting Procedures

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or 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.

Safety Data Sheet

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Fire and/or Explosion Hazards: N/A

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

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

Handling: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-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.

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

Storage Code: Green - general chemical storage

Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>		<u>OSHA PEL</u>	
	(TWA)	(STEL)	(TWA)	(STEL)
Graphite Powder	2 mg/m3 TWA (all forms except graphite fibers, respirable fraction)	N/A	15 mg/m3 TWA (synthetic, total dust); 5 mg/m3 TWA (synthetic, respirable fraction)	N/A

Control Parameters

Engineering Measures:

Local exhaust ventilation or other engineering controls are normally required when 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.

Respirator Type(s):

NIOSH approved air purifying respirator with dust/mist filter.

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective 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.

Gloves:

Nitrile

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

Safety Data Sheet

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: No data available
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: None known.
Incompatible Materials: Strong oxidizing agents
Hazardous Decomposition Products: Carbon oxides
Hazardous Polymerization: Will not occur

Section 11

Toxicity Data

Routes of Entry: N/A
Symptoms (Acute): N/A
Delayed Effects: No data available

Acute Toxicity:	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Chemical Name No data available	7782-42-5	Not determined	Not determined	Not determined

Carcinogenicity:	CAS Number	IARC	NTP	OSHA
Chemical Name 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: No evidence of a sensitization effect.
Reproductive: 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

Overview: This material is not expected to be harmful to the ecology. Keep out of waterways.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
N/A	7782-42-5	

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.
Waste Disposal Code(s): Not Determined

Section 14

Transport Information

Ground - DOT Proper Shipping Name:	Air - IATA Proper Shipping Name:
N/A	Not regulated for air transport by IATA.

Section 15

Regulatory Information

Safety Data Sheet

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available	7782-42-5	No	No	No	No	No

Section 16

Additional Information

Revised: 09/03/2014

Replaces: 09/03/2014

Printed: 09-11-2014

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

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health



SAFETY DATA SHEET

THE DOW CHEMICAL COMPANY

Product name: GREAT STUFF™ Gaps & Cracks Insulating Foam
Sealant 12oz HC EF QP

Issue Date: 07/31/2015

Print Date: 08/03/2015

THE DOW CHEMICAL COMPANY encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product name: GREAT STUFF™ Gaps & Cracks Insulating Foam Sealant 12oz HC EF QP

Recommended use of the chemical and restrictions on use

Identified uses: Polyurethane foam.

COMPANY IDENTIFICATION

THE DOW CHEMICAL COMPANY
2030 WILLARD H DOW CENTER
MIDLAND MI 48674-0000
UNITED STATES

Customer Information Number:

800-258-2436
SDSQuestion@dow.com

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 800-424-9300

Local Emergency Contact: 800-424-9300

2. HAZARDS IDENTIFICATION

Hazard classification

This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Flammable aerosols - Category 2

Acute toxicity - Category 4 - Inhalation

Skin irritation - Category 2

Eye irritation - Category 2B

Respiratory sensitisation - Category 1

Skin sensitisation - Category 1

Effects on or via lactation

Specific target organ toxicity - single exposure - Category 3

Specific target organ toxicity - repeated exposure - Category 2 - Inhalation

Label elements

Hazard pictograms



Signal word: **DANGER!**

Hazards

Flammable aerosol.

Causes skin and eye irritation.

May cause an allergic skin reaction.

Harmful if inhaled.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation.

May cause harm to breast-fed children.

May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

Precautionary statements

Prevention

Obtain special instructions before use.

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

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

Avoid contact during pregnancy/ while nursing.

Wash skin thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves.

In case of inadequate ventilation wear respiratory protection.

Response

IF ON SKIN: Wash with plenty of soap and water.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/ attention.

If skin irritation or rash occurs: Get medical advice/ attention.

If eye irritation persists: Get medical advice/ attention.

Take off contaminated clothing and wash before reuse.

Storage

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

Store locked up.

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

Disposal

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

Other hazards

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Polyurethane prepolymer
This product is a mixture.

Component	CASRN	Concentration
Diphenylmethane Diisocyanate, isomers and homologues	9016-87-9	>= 10.0 - <= 30.0 %
4,4' -Methylenediphenyl diisocyanate	101-68-8	>= 10.0 - <= 30.0 %
Polymethylenepolyphenylisocyanate, propoxylated glycerin polymer	57029-46-6	>= 10.0 - <= 30.0 %
Polymethylenepolyphenyl polyisocyanate, polypropyleneglycol copolymer	53862-89-8	>= 10.0 - <= 30.0 %
Tris(1-chloro-2-propyl) phosphate	13674-84-5	>= 5.0 - <= 10.0 %
Paraffin waxes and Hydrocarbon waxes, chlorinated	63449-39-8	>= 5.0 - <= 10.0 %
Isobutane	75-28-5	>= 7.0 - <= 13.0 %
Methyl ether	115-10-6	>= 1.0 - <= 5.0 %
Propane	74-98-6	>= 1.0 - <= 5.0 %

Note

Note: CAS 101-68-8 is an MDI isomer that is part of CAS 9016-87-9.

4. FIRST AID MEASURES

Description of first aid measures

General advice: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

Skin contact: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. An MDI skin decontamination study demonstrated that cleaning very soon after exposure is important, and that a polyglycol-based skin cleanser or corn oil may be more effective than soap and water. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Suitable emergency safety shower facility should be available in work area.

Eye contact: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms and effects, both acute and delayed: Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Notes to physician: Maintain adequate ventilation and oxygenation of the patient. May cause respiratory sensitization or asthma-like symptoms. Bronchodilators, expectorants and antitussives may be of help. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Exposure may increase "myocardial irritability". Do not administer sympathomimetic drugs such as epinephrine unless absolutely necessary. If you are sensitized to diisocyanates, consult your physician regarding working with other respiratory irritants or sensitizers. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome).

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Unsuitable extinguishing media: Do not use direct water stream. Straight or direct water streams may not be effective to extinguish fire.

Special hazards arising from the substance or mixture

Hazardous combustion products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Isocyanates. Hydrogen chloride. Carbon monoxide. Carbon dioxide. Hydrogen cyanide.

Unusual Fire and Explosion Hazards: Contains flammable propellant. Aerosol cans exposed to fire can rupture and become flaming projectiles. Propellant release may result in a fireball. Vapors are

heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Dense smoke is produced when product burns.

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Water may not be effective in extinguishing fire. Do not use direct water stream. May spread fire. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Eliminate ignition sources. Move container from fire area if this is possible without hazard. Use water spray to cool fire-exposed containers and fire-affected zone until fire is out.

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Evacuate area. Only trained and properly protected personnel must be involved in clean-up operations. Keep personnel out of low areas. Keep personnel out of confined or poorly ventilated areas. Keep upwind of spill. Ventilate area of leak or spill. No smoking in area. Check area with combustible gas detector before reentering area. Ground and bond all containers and handling equipment. Confined space entry procedures must be followed before entering the area. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Vapor explosion hazard. Keep out of sewers. See Section 10 for more specific information. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up: Contain spilled material if possible. Ground and bond all containers and handling equipment. Isolate area until gas has dispersed. Use non-sparking tools in cleanup operations. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Check area with combustible gas detector before reentering area. Ground and bond all containers and handling equipment. Collect in suitable and properly labeled containers. Absorb with materials such as: Clay. Dirt. Milsorb®. Sand. Sawdust. Vermiculite. See Section 10 for more specific information. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling: Keep away from heat, sparks and flame. No smoking, open flames or sources of ignition in handling and storage area. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid breathing vapor. Never use air pressure for transferring product. Wash thoroughly after handling. Keep container closed. Use only with adequate ventilation. Keep out of reach of children. Vapors are heavier than air and may travel a long distance

and accumulate in low lying areas. Ignition and/or flash back may occur. Contents under pressure. Do not puncture or incinerate container. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Do not enter confined spaces unless adequately ventilated. Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Conditions for safe storage: Minimize sources of ignition, such as static build-up, heat, spark or flame. Store in a dry place. See Section 10 for more specific information.

Storage stability

Storage temperature: 49 °C (120 °F) **Storage Period:** 12 Month

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
4,4'-Methylenediphenyl diisocyanate	ACGIH	TWA	0.005 ppm
	OSHA Z-1	C	0.2 mg/m3 0.02 ppm
	NIOSH REL	TWA	0.05 mg/m3 0.005 ppm
	NIOSH REL	C	0.2 mg/m3 0.02 ppm
Isobutane	ACGIH	STEL	1,000 ppm
Methyl ether	US WEEL	TWA	1,000 ppm
Propane	ACGIH		
	OSHA Z-1	TWA	1,800 mg/m3 1,000 ppm

This material contains a simple asphyxiant which may displace oxygen. Insure adequate ventilation to prevent an oxygen deficient atmosphere.

The minimum requirement of 19.5% oxygen at sea level (148 torr O₂, dry air) provides an adequate amount of oxygen for most work assignments.

Exposure controls

Engineering controls: Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Exhaust systems should be designed to move the air away from the source of vapor/aerosol generation and people working at this point. The odor and irritancy of this material are inadequate to warn of excessive exposure. Lethal concentrations may exist in areas with poor ventilation.

Individual protection measures

Eye/face protection: Use safety glasses (with side shields).

Skin protection

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Viton. Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove

for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection: Atmospheric levels should be maintained below the exposure guideline. When atmospheric levels may exceed the exposure guideline, use an approved air-purifying respirator equipped with an organic vapor sorbent and a particle filter. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure air-supplying respirator (air line or self-contained breathing apparatus). For emergency response or for situations where the atmospheric level is unknown, use an approved positive-pressure self-contained breathing apparatus or positive-pressure air line with auxiliary self-contained air supply. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply.

The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Foam
Color	Yellow
Odor	Mild
Odor Threshold	No test data available
pH	Not applicable
Melting point/range	No test data available
Freezing point	No test data available
Boiling point (760 mmHg)	Not applicable
Flash point	closed cup -104 °C (-155 °F) <i>Closed Cup</i>
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammability (solid, gas)	No data available
Lower explosion limit	No test data available
Upper explosion limit	No test data available
Vapor Pressure	1,151 hPa at 55 °C (131 °F) <i>Not reported</i> Container is under pressure.
Relative Vapor Density (air = 1)	No test data available
Relative Density (water = 1)	1.06 <i>Estimated.</i>
Water solubility	Insoluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No test data available
Decomposition temperature	No test data available

Kinematic Viscosity	Not applicable
Explosive properties	Not explosive
Oxidizing properties	No
Molecular weight	No test data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions. See Storage, Section 7.
Unstable at elevated temperatures.

Possibility of hazardous reactions: Can occur. Exposure to elevated temperatures can cause product to decompose and generate gas. This can cause pressure build-up and/or rupturing of closed containers. Acids.

Conditions to avoid: Avoid temperatures above 50 °C
Elevated temperatures can cause container to vent and/or rupture. Exposure to elevated temperatures can cause product to decompose.

Incompatible materials: Avoid contact with: Acids. Alcohols. Amines. Ammonia. Bases. Metal compounds. Strong oxidizers. Products based on diisocyanates like TDI and MDI react with many materials to release heat. The reaction rate increases with temperature as well as with increased contact; these reactions can become violent. Contact is increased by stirring or if the other material acts as a solvent. Products based on diisocyanates such as TDI and MDI are not soluble in water and will sink to the bottom, but react slowly at the interface. The reaction forms carbon dioxide gas and a layer of solid polyurea. Reaction with water will generate carbon dioxide and heat.

Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition.

11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

Acute toxicity

Acute oral toxicity

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Observations in animals include: Gastrointestinal irritation.

As product: Single dose oral LD50 has not been determined.

LD50, Rat, > 2,000 mg/kg Estimated.

Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

LD50, Rabbit, > 2,000 mg/kg Estimated.

Acute inhalation toxicity

In confined or poorly ventilated areas, vapor can easily accumulate and can cause unconsciousness and death due to displacement of oxygen. Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs. May cause pulmonary edema (fluid in the lungs.) Effects may be delayed. May cause central nervous system depression. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed. Excessive exposure may increase sensitivity to epinephrine and increase myocardial irritability (irregular heartbeats). Decreased lung function has been associated with overexposure to isocyanates.

As product: The LC50 has not been determined.

Skin corrosion/irritation

Prolonged contact may cause moderate skin irritation with local redness.

Material may stick to skin causing irritation upon removal.

May stain skin.

Serious eye damage/eye irritation

May cause moderate eye irritation.

May cause slight temporary corneal injury.

Sensitization

Skin contact may cause an allergic skin reaction.

Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

May cause allergic respiratory reaction.

MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.

Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

Specific Target Organ Systemic Toxicity (Single Exposure)

May cause respiratory irritation.

Route of Exposure: Inhalation

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

Carcinogenicity

Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m³) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

Teratogenicity

In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only at high doses which were toxic to the mother.

Reproductive toxicity

Based on information for component(s): May cause harm to breastfed babies.

Mutagenicity

In vitro genetic toxicity studies were negative for component(s) tested. Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

Aspiration Hazard

Based on physical properties, not likely to be an aspiration hazard.

COMPONENTS INFLUENCING TOXICOLOGY:

Diphenylmethane Diisocyanate, isomers and homologues

Acute inhalation toxicity

LC50, Rat, 4 Hour, dust/mist, 0.49 mg/l

For similar material(s): 2,4'-Diphenylmethane diisocyanate (CAS 5873-54-1). LC50, Rat, 4 Hour, Aerosol, 0.31 mg/l

For similar material(s): 4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8). LC50, Rat, 1 Hour, Aerosol, 2.24 mg/l

4,4' -Methylenediphenyl diisocyanate

Acute inhalation toxicity

LC50, Rat, 1 Hour, dust/mist, 2.24 mg/l

Polymethylenepolyphenylisocyanate, propoxylated glycerin polymer

Acute inhalation toxicity

The LC50 has not been determined.

Polymethylenepolyphenyl polyisocyanate, polypropyleneglycol copolymer

Acute inhalation toxicity

The LC50 has not been determined.

Tris(1-chloro-2-propyl) phosphate

Acute inhalation toxicity

LC50, Rat, 4 Hour, dust/mist, > 7 mg/l

Paraffin waxes and Hydrocarbon waxes, chlorinated

Acute inhalation toxicity

As product: The LC50 has not been determined.

Isobutane

Acute inhalation toxicity

LC50, Mouse, 1 Hour, 52 mg/l

Methyl ether

Acute inhalation toxicity

LC50, Rat, 4 Hour, gas, 164000 ppm

Propane

Acute inhalation toxicity

LC50, Rat, male and female, 4 Hour, vapour, > 425000 ppm

12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

Toxicity

Diphenylmethane Diisocyanate, isomers and homologues

Acute toxicity to fish

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species.

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Based on information for a similar material:

LC50, Danio rerio (zebra fish), static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

Based on information for a similar material:

EC50, Daphnia magna (Water flea), static test, 24 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants

Based on information for a similar material:

NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, 1,640 mg/l, OECD Test Guideline 201 or Equivalent

Toxicity to bacteria

Based on information for a similar material:

EC50, activated sludge, static test, 3 Hour, Respiration rates., > 100 mg/l

Toxicity to soil-dwelling organisms

EC50, Eisenia fetida (earthworms), Based on information for a similar material:, 14 d, > 1,000 mg/kg

Toxicity to terrestrial plants

EC50, Avena sativa (oats), Growth inhibition, 1,000 mg/l

EC50, Lactuca sativa (lettuce), Growth inhibition, 1,000 mg/l

4,4'-Methylenediphenyl diisocyanate

Acute toxicity to fish

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species.

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Based on information for a similar material:

LC50, Danio rerio (zebra fish), static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

Based on information for a similar material:

EC50, Daphnia magna (Water flea), static test, 24 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants

Based on information for a similar material:

NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, 1,640 mg/l, OECD Test Guideline 201 or Equivalent

Toxicity to bacteria

Based on information for a similar material:

EC50, activated sludge, static test, 3 Hour, Respiration rates., > 100 mg/l

Toxicity to soil-dwelling organisms

EC50, Eisenia fetida (earthworms), Based on information for a similar material:, 14 d, > 1,000 mg/kg

Toxicity to terrestrial plants

EC50, Avena sativa (oats), Growth inhibition, 1,000 mg/l

EC50, Lactuca sativa (lettuce), Growth inhibition, 1,000 mg/l

Polymethylenepolyphenylisocyanate, propoxylated glycerin polymer

Acute toxicity to fish

For this family of materials:

Material is practically non-toxic to aquatic organisms on an acute basis
(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Polymethylenepolyphenyl polyisocyanate, polypropyleneglycol copolymer

Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

Tris(1-chloro-2-propyl) phosphate

Acute toxicity to fish

Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

LC50, Lepomis macrochirus (Bluegill sunfish), static test, 96 Hour, 84 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 131 mg/l

Acute toxicity to algae/aquatic plants

ErC50, Pseudokirchneriella subcapitata (green algae), static test, 96 Hour, Growth rate inhibition, 82 mg/l, OECD Test Guideline 201 or Equivalent

Toxicity to bacteria

EC50, activated sludge, Respiration inhibition, 3 Hour, 784 mg/l, OECD 209 Test

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, 32 mg/l
LOEC, Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, > 32 mg/l

Paraffin waxes and Hydrocarbon waxes, chlorinated

Acute toxicity to fish

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, > 0.1 mg/l

Isobutane

Acute toxicity to fish

No relevant data found.

Methyl ether

Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, Poecilia reticulata (guppy), semi-static test, 96 Hour, > 4,000 mg/l

Acute toxicity to aquatic invertebrates

LC50, Daphnia magna (Water flea), 48 Hour, > 4,000 mg/l, OECD Test Guideline 202 or Equivalent

Propane

Acute toxicity to fish

No relevant data found.

Persistence and degradability

Diphenylmethane Diisocyanate, isomers and homologues

Biodegradability: In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

10-day Window: Not applicable

Biodegradation: 0 %

Exposure time: 28 d

Method: OECD Test Guideline 302C or Equivalent

4,4' -Methylenediphenyl diisocyanate

Biodegradability: In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

10-day Window: Not applicable

Biodegradation: 0 %

Exposure time: 28 d

Method: OECD Test Guideline 302C or Equivalent

Polymethylenepolyphenylisocyanate, propoxylated glycerin polymer

Biodegradability: For this family of materials: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Polymethylenepolyphenyl polyisocyanate, polypropyleneglycol copolymer

Biodegradability: Expected to degrade slowly in the environment.

Tris(1-chloro-2-propyl) phosphate

Biodegradability: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Fail

Biodegradation: 14 %

Exposure time: 28 d

Method: OECD Test Guideline 301E or Equivalent

10-day Window: Not applicable

Biodegradation: 95 %

Exposure time: 64 d

Method: OECD Test Guideline 302A or Equivalent

Theoretical Oxygen Demand: 1.17 mg/mg

Photodegradation

Test Type: Half-life (indirect photolysis)

Sensitizer: OH radicals

Atmospheric half-life: 0.24 d

Method: Estimated.

Paraffin waxes and Hydrocarbon waxes, chlorinated

Biodegradability: Expected to degrade slowly in the environment.

Theoretical Oxygen Demand: 2.89 mg/mg

Isobutane

Biodegradability: Biodegradation may occur under aerobic conditions (in the presence of oxygen).

Theoretical Oxygen Demand: 3.58 mg/mg

Photodegradation

Test Type: Half-life (indirect photolysis)

Sensitizer: OH radicals

Atmospheric half-life: 4.4 d

Method: Estimated.

Methyl ether

Biodegradability: Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Fail

Biodegradation: 5 %

Exposure time: 28 d

Method: OECD Test Guideline 301A or Equivalent

Theoretical Oxygen Demand: 2.08 mg/mg

Photodegradation

Test Type: Half-life (indirect photolysis)

Sensitizer: OH radicals

Atmospheric half-life: 6.4 d

Method: Estimated.

Propane

Biodegradability: No relevant data found.

Theoretical Oxygen Demand: 3.64 mg/mg

Photodegradation

Test Type: Half-life (indirect photolysis)

Sensitizer: OH radicals

Atmospheric half-life: 8.4 d

Method: Estimated.

Bioaccumulative potential

Diphenylmethane Diisocyanate, isomers and homologues

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Reacts with water. In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Bioconcentration factor (BCF): 92 Cyprinus carpio (Carp) 28 d

4,4' -Methylenediphenyl diisocyanate

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Reacts with water. In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Bioconcentration factor (BCF): 92 Cyprinus carpio (Carp) 28 d

Polymethylenepolyphenylisocyanate, propoxylated glycerin polymer

Bioaccumulation: No relevant data found.

Polymethylenepolyphenyl polyisocyanate, polypropyleneglycol copolymer

Bioaccumulation: In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Tris(1-chloro-2-propyl) phosphate

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 2.59 Measured

Bioconcentration factor (BCF): 0.8 - 4.6 Cyprinus carpio (Carp) 42 d Measured

Paraffin waxes and Hydrocarbon waxes, chlorinated

Bioaccumulation: Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).

Partition coefficient: n-octanol/water(log Pow): 7.4 Estimated.

Isobutane

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 2.76 Measured

Methyl ether

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 0.10 Measured

Propane

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient: n-octanol/water(log Pow): 2.36 Measured

Mobility in soil

Diphenylmethane Diisocyanate, isomers and homologues

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

4,4' -Methylenediphenyl diisocyanate

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Polymethylenepolyphenylisocyanate, propoxylated glycerin polymer

No relevant data found.

Polymethylenepolyphenyl polyisocyanate, polypropyleneglycol copolymer

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Tris(1-chloro-2-propyl) phosphate

Potential for mobility in soil is slight (Koc between 2000 and 5000).
Partition coefficient(Koc): 1300 Estimated.

Paraffin waxes and Hydrocarbon waxes, chlorinated

Expected to be relatively immobile in soil (Koc > 5000).
Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
Partition coefficient(Koc): > 5000 Estimated.

Isobutane

Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient(Koc): 35 Estimated.

Methyl ether

Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient(Koc): 1.29 - 14 Estimated.

Propane

Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient(Koc): 24 - 460 Estimated.

13. DISPOSAL CONSIDERATIONS

Disposal methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE

INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device.

14. TRANSPORT INFORMATION

DOT

Proper shipping name	Aerosols
UN number	UN 1950
Class	2.1
Packing group	
Reportable Quantity	MDI

Classification for SEA transport (IMO-IMDG):

Proper shipping name	AEROSOLS
UN number	UN 1950
Class	2.1
Packing group	
Marine pollutant	Paraffin waxes and Hydrocarbon waxes, chlorinated
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Proper shipping name	Aerosols, flammable
UN number	UN 1950
Class	2.1
Packing group	

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard

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

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Acute Health Hazard
Chronic Health Hazard
Fire Hazard

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

Components

Diphenylmethane Diisocyanate, isomers and homologues
4,4' -Methylenediphenyl diisocyanate

CASRN

9016-87-9
101-68-8

Pennsylvania Worker and Community Right-To-Know Act:

The following chemicals are listed because of the additional requirements of Pennsylvania law:

Components

Isobutane
Methyl ether
Propane

CASRN

75-28-5
115-10-6
74-98-6

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

United States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION

Revision

Identification Number: 101265380 / A001 / Issue Date: 07/31/2015 / Version: 6.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
C	Ceiling
NIOSH REL	USA. NIOSH Recommended Exposure Limits
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
STEL	Short-term exposure limit
TWA	8-hour, time-weighted average
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

THE DOW CHEMICAL COMPANY urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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
IL
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

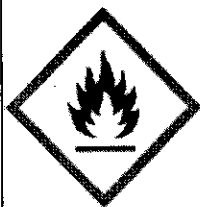
Emergency Overview

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 Effects No information available.

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	Liquid	Odor	Pine
Appearance	Clear	Odor Threshold	No information available
Color	Pale yellow to water / white		
Property	Values	Remarks/ Method	
pH	UNKNOWN	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	No data available	None known	
Flash Point	33 C / 91 F	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	No data available	None known	
Water Solubility	Negligible	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/water	No data available	None known	
Autoignition temperature	No data available	None known	
Decomposition temperature	No data available	None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity	No data available	None known	
Explosive properties	No data available		
Oxidizing Properties	No data available		
Other Information			
Softening Point	No data available		
VOC Content (%)	No data available		
Particle Size	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	

Information on toxicological effects

Symptoms	No information available.
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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	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 Turpentine soaked 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 Ignitable

14. TRANSPORT INFORMATION**DOT**

Proper Shipping Name	CONSUMER COMMODITY
Hazard Class	ORM-D
Description	CONSUMER COMMODITY, ORM-D
Emergency Response Guide Number	128

TDG

UN-No.	UN1299
Proper Shipping Name	TURPENTINE
Hazard Class	3
Packing Group	III
Description	UN1299, TURPENTINE, 3, III

MEX

UN-No.	UN1299
Proper Shipping Name	TURPENTINE
Hazard Class	3



Packing Group	III
Description	UN1299 TURPENTINE, 3, III

ICAO

UN-No.	UN1299
Proper Shipping Name	TURPENTINE
Hazard Class	3
Packing Group	III
Description	UN1299, TURPENTINE, 3, III

IATA

UN-No.	UN1299
Proper Shipping Name	TURPENTINE
Hazard Class	3
Packing Group	III
Description	UN1299, TURPENTINE, 3, III

IMDG/IMO

UN-No.	UN1299
Proper Shipping Name	TURPENTINE
Hazard Class	3
Packing Group	III
EmS No.	F-E, S-E
Description	UN1299, TURPENTINE, 3, III, FP 33C

RID

UN-No.	UN1299
Proper Shipping Name	TURPENTINE
Hazard Class	3
Packing Group	III
Classification code	F1
Description	UN1299 TURPENTINE, 3, III

ADR

UN-No.	UN1299
Proper Shipping Name	TURPENTINE
Hazard Class	3
Packing Group	III
Classification code	F1
Description	UN1299 TURPENTINE, 3, III

ADN

UN-No.	UN1299
Proper Shipping Name	TURPENTINE
Hazard Class	3
Packing Group	III
Classification code	F1
Description	UN1299 TURPENTINE, 3, III
Hazard Labels	3
Limited Quantity	5 L
Ventilation	VE01

15. REGULATORY INFORMATION**International Inventories**

TSCA	Complies
DSL	All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory



DSL/NDL - 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			X		

International Regulations

Canada

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
Revision Date	17-Sep-2014
Revision Note	No information available

Disclaimer

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End of Safety Data Sheet