

CENTERVILLE, UT 84014

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ABORATORY PRODUCTS

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www.hvchemical.com

SAFETY DATA SHEET Hi Valley Chemical

Glycerin

PRODUCT AND COMPANY IDENTIFICATION

| Product Identifier: | Glycerin |
|---|--|
| Synonyms: | Glycerol, 1,2,3-Propanetriol |
| SDS Number: | R-016 |
| Product Code: | 514161-PT, 514161-QT, 514161-1, 514161-5, 514161-30, 51416-55 |
| Revision Date: | 9/16/2015 |
| Version: | 1.0 |
| CAS Number: | 56-81-5 |
| Chemical Formula: | C3H8O3 |
| Supplier Details: Emergency: Phone: Email: Web: | High Valley Products, Inc. 1134 West 850 North Centerville, Utah 84014 PERS: 800-633-8253 801-295-9591 sales@hvchemical.com www.hvchemical.com |

HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

no GHS classifications indicated

GHS Label elements, including precautionary statements

GHS Signal Word: NONE

no GHS pictograms indicated for this product

GHS Hazard Statements:

no GHS hazards statements indicated

GHS Precautionary Statements:

no GHS precautionary statements indicated

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COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

| Cas# | % | Chemical Name |
|---------|------|---------------|
| 56-81-5 | 100% | Glycerine |

FIRST AID MEASURES

| Inhalation: | If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician. |
|---------------|--|
| Skin Contact: | Wash with soap and water. Consult a physician. |
| Eye Contact: | Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. |
| Ingestion: | Rinse mouth with water. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |

FIRE FIGHTING MEASURES

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture Carbon oxides

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions:

Do not let product enter drains.

Methods and materials for containment and cleaning up:

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

| 7 | HANDLING AND STORAGE | |
|-----------------------|---|--|
| Handling Precautions: | Avoid contact with eyes, skin, or clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. | |
| Storage Requirements: | Keep container tightly closed. Store in cool/dry area. | |

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Personal Protective Equipment:

Glycerine (56-81-5) [100%]

Personal protective equipment

Eye/face protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril (KCL 740 / Aldrich Z677272, Size M)

Splash contact: Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection: impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Do not let product enter drains.

Exposure Guidelines:

Glycerine (56-81-5) [100%]

Components with workplace control parameters

| TWA | 10 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 | | |
|--|----------|--|--|--|
| TWA | 5 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 | | |
| TWA | 10 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) | | |
| Upper Respiratory Tract irritation See Appendix D - Substances with No Established RELs | | | | |
| TWA | 5 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants | | |
| TWA | 15 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants | | |

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless. **Physical State:** Liquid Odor: Odorless **Odor Threshold:** No data available Solubility: soluble Spec Grav./Density: 1.25 Viscosity: No data available **Boiling Point:** 182 °C (360 °F) at 27 hPa (20 mmHg) Freezing/Melting Pt.: Melting point/range: 20 °C (68 °F) Flash Point: 160 °C (320 °F) **Partition Coefficient:** No data available Vapor Pressure: 0.0033 hPa (0.0025 mmHg) at 50 °C (122 °F) 3.18 - (Air = 1.0) Vapor Density: 5.5 - 8 pH: Evap. Rate: No data available Auto-Ignition Temp: No data available Decomp Temp: No data available UFL/LFL: LFL: 0.9% (V)

STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Conditions to Avoid: Materials to Avoid: No data available Stable under normal conditions. No data available Strong Bases; Strong Oxidizing Agents.

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TOXICOLOGICAL INFORMATION

Glycerine (56-81-5) [100%]

Information on toxicological effects

Acute toxicity: LD50 Oral - rat - 12,600 mg/kg Inhalation: no data available

LD50 Dermal - rabbit - > 10,000 mg/kg

Skin corrosion/irritation: Skin - rabbit Result: Mild skin irritation - 24 h

Serious eye damage/eye irritation: Eyes - rabbit Result: Mild eye irritation - 24 h

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

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.

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

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.

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: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: MA8050000

Prolonged or repeated exposure may cause:, Nausea, Headache, Vomiting Kidney - Irregularities - Based on Human Evidence

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Glycerine (56-81-5) [100%]

Information on ecological effects

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: no data available

DISPOSAL CONSIDERATIONS

Glycerine (56-81-5) [100%]

Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

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TRANSPORT INFORMATION

Non DOT regulated.

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REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Glycerine (56-81-5) [100%] HAP, MASS, OSHAWAC, PA, TSCA, TXAIR

Regulatory CODE Descriptions

HAP = Hazardous Air Pollutants MASS = MA Massachusetts Hazardous Substances List OSHAWAC = OSHA Workplace Air Contaminants 16

OTHER INFORMATION

Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

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