Safety Data Sheet Glycerin 96% USP

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: Glycerin 96% USP

SDS number: GLYC96

Synonym(s): Glycerin; Glycerol; 1,2,3-Propanetriol; 1,2,3-Trihydroxypropane

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

General use: None specified Uses advised against: None known

1.3 Details of the supplier and of the safety data sheet

Manufacturer/Distributor

SolvChem, Inc. 1904 Mykawa Road Pearland, TX 77581-3210 USA 1-281-485-5377

1.4 Emergency telephone number

CHEMTREC: 1-800-424-9300 (USA) CANUTEC: 1-613-996-6666 (Canada)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition: Mixture

Classification in accordance with 29 CFR 1910 (OSHA HCS) and Regulation EC No. 1272/2008 Not a hazardous substance or mixture according to OSHA or to European Union Legislation

2.2 Label elements

Not a dangerous substance or mixture according to GHS.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None known

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

| Substances | t- worldont | CAS Number | EC Number | Index Number | GHS Classification |
|-------------|------------------------|------------|------------------|-------------------------------|------------------------------|
| % by Weight | Ingredient Glycerin | 56-81-5 | 200-289-5 | | |
| 96 - 96.5 | Glycelin | | w. t. d language | lgo of the supplier and in th | e concentrations applicable, |

There are no additional ingredients present in this product 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.

3.2 Mixtures

Not applicable

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product mist or vapor causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. If unconscious, maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist or if the victim feels unwell, seek medical attention.

Eyes: Immediately flush eyes with large amounts of water or saline solution for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after first 2 minutes and continue rinsing. If irritation persists seek medical attention, preferably from an ophthalmologist.

Skin: Flush skin with large amounts of water while removing contaminated clothing. Wash the affected area with soap and water followed by thorough rinsing. Wash contaminated clothing and shoes before reuse. If irritation persists, seek medical attention.

Ingestion: Rinse mouth with water if the victim is conscious. Remove dentures if present. Do not induce vomiting unless directed to do so by medical personnel. Vomiting may occur spontaneously. To prevent aspiration of material into the lungs, lay the victim on one side with the head lower than the waist. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. Seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eyes: May cause mild, transient eye irritation.

Effective Date: 16 April 2020

Glycerin 96% USP

Engineering measures: Technical measures and appropriate working operations should be given priority over the use of personal protective 8.2 Exposure controls

equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1. Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change the protective equipment should be enquired at the representative supplier. Trygram industries. I admite storing of doing this material another sequipped with an eyewash station and salety shower. Onling the strength of the sequipped with an eyewash station and salety shower. Onling the strength of the sequipped with an eyewash station and salety shower. Onling the strength of the sequipped with an eyewash station and salety shower. Onling the strength of the sequipped with an eyewash station and salety shower. Onling the sequipped with an eyewash station and salety shower.

Eyelface protection: Wear safety glasses with unperforated side shields or protective splash goggles during handling or use.

Hand protection: Chemical protective gloves should not be needed when handling this material. For long exposure wear gloves made of natural rubber, nitrile rubber, PVC or those recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

Respiratory protection: Always use an approved respirator when vapor/aerosols exceed permissible exposure limits. Where risk assessment Skin protection: Wear protective clothing. Wear protective boots if the situation requires. shows air-purifying respirators are appropriate use a half-mask 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). Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, Environmental exposure controls: Do not empty into drains. maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection





SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Odor

Odor Threshold

Molecular Weight

Chemical Formula

pН

Freezing/Melting Point Initial Bolling Point

Evaporation Rate

Flammability (solid, gas)

Flash Point

Autoignition Temperature Decomposition Temperature

Lower Explosive Limit (LEL)

Upper Explosive Limit (UEL)

Vapor Pressure

Vapor Density

Specific Gravity

Density

Viscosity

Solubility in Water Partition Coefficient (n-octanol/water)

Oxidizing Properties **Explosive Properties**

Volatiles by Weight @ 21 °C

Clear, colorless liquid

Mild, characteristic

No data available 92.09 g/mol

C₃H₈O₃

5.5 - 8.0

18 °C (64.4 °F)

182 °C (360 °F) [estimated]

No data available Not applicable

370 °C (698 °F)

No data available

No data available

No data available

No data available

< 0.2 mm Hg

3.18 [Air = 1]

1,2526

1.253 g/ml (10.46 lb/gal)

1,412 mPa.s

Miscible

log Pow = - 1.8

Not applicable Not applicable

No data available

9.2 Other Data

None known SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

This material is stable under normal handling conditions and use.

10.2 Chemical Stability

This material is stable under recommended storage and handling conditions.

Effective Date: 16 April 2020

Glycerin 96% USP

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Methods of disposal: The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products in accordance with national, state and local regulations. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

RCRA F-Series: No listings above the reportable threshold (de minimis) RCRA U-Series: No listings above the reportable threshold (de minimis)

SECTION 14 - TRANSPORTATION INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

USA DOT (Ground Transportation) - Bulk and Non-bulk

Not regulated for transport

IMO/IMDG (Water Transportation)

Not regulated for transport (Consult IMO regulations before transporting ocean bulk.)

ICAO/IATA (Air Transportation)

Not regulated for transport

RID/ADR (Rail Transportation)

Not regulated for transport

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

U. S. Federal Regulations

OSHA Hazard Communication Standard: This material is not classified as hazardous in accordance with OSHA 29 CFR 1910-1200.

OSHA Process Safety Management Standard: This product is not regulated under OSHA PSM Standard 29 CFR 1910.119.

EPA Risk Management Planning Standard: This product is not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

EPA Federal Insecticide, Fungicide and Rodenticide Act: This product is not a registered Pesticide under the FIFRA, 40 CFR Part 150.

Toxic Substance Control Act (TSCA) Inventory: All substances in this product are listed on the TSCA Inventory. This product is not subject to TSCA 12(b) Export Notification.

Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b)) and 1310.4(f)(2)) and Chemical Code Number: No listings

Drug Enforcement Administration (DEA) Lists 1 & 2, Exempt Chemical Mixtures (21 CFR 1310.12(c)) and Code Number: No listings

Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals: No listings

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: None known

SARA 313 Information: This material does not contain any substances that are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance: This material does not contain any substances that are subject to the reporting levels established by these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification: This material does not contain any substances that are subject to the reporting levels established by these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains no CERCLA reportable substances.

Clean Air Act (CAA)

This product does not contain Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain Class 1 ozone depletors.

This product does not contain Class 2 ozone depletors.

Clean Water Act (CWA)

This product does not contain Hazardous Substances under the CWA.

This product does not contain Priority Pollutants.

This product does not contain Toxic Pollutants.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

This product contains no chemical(s) known to the state of California to cause cancer birth defects or reproductive harm in concentrations that exceed the threshold (de minimis) reporting levels established under Proposition 65.

Other U.S. State Inventories

Other U.S. State Inventories

Glycerin (CAS #56-81-5) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists; MA, MN, NJ, PA, RI, WA.

Effective Date: 16 April 2020

Glycerin 96% USP

DISCLAIMER OF RESPONSIBILITY

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented, and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume damage or expense arising out of or in any way responsibility and expressly disclaim liability for loss, connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

Revision Date: 16 April 2020, Version 1

<end of document>

Page 7 of 7