SAFETY DATA SHEET



Revision Date: 09/05/2019 Date of issue: 01/27/2015

GL-96.0, GL-96.0 K

SECTION 1: IDENTIFICATION

Product Identifier
Product Form: Mixture

Product Name: GL-96.0, GL-96.0 K

Synonyms: Glycerol/Glycerin USP, GL-96.0, GL-96.0 K

Intended Use of the Product
Use Of The Substance/Mixture:

Multiple uses including as emulsifier, emollient, plasticizer, humectants, sweetener, anti-freeze, in

surface coatings and paints, cosmetics, drug and food products. Intermediate for making glycerol derivatives.

Name, Address, and Telephone of the Responsible Party

Company

Peter Cremer North America, LP 3117 Southside Ave. Cincinnati, OH 45204 1-513-471-7200 1-877-901-7262 (Toll free)

Emergency Telephone Number

Emergency Number: CHEMTREC: 1-800-424-9300 US and Canada; 1-703-527-3887 for calls originating elsewhere

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS-US/CA Classification

Not classified

Label Elements

GHS-US/CA Labeling No labeling applicable

Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
1,2,3-Propanetriol	Propane-1,2,3-triol / GLYCERIN / 1,2,3-Trihydroxypropane / Glycerol / Glycerine / Glycerin	(CAS-No.) 56-81-5	96	Not classified
Water	AQUA / Aqua	(CAS-No.) 7732-18-5	4	Not classified

Full text of H-phrases: see section 16



^{*}Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: Obtain medical attention if breathing difficulty persists. When symptoms occur: go into open air and ventilate suspected area.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

 $\textbf{Ingestion:} \ \textbf{Do} \ \textbf{NOT} \ \textbf{induce} \ \textbf{vomiting.} \ \textbf{Rinse} \ \textbf{mouth.} \ \textbf{Obtain} \ \textbf{medical} \ \textbf{attention.}$

Most Important Symptoms and Effects Both Acute and Delayed

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

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes. **Ingestion:** Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

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 considered flammable but may burn at high temperatures. Glycerin decomposes upon heating above 290°C, forming corrosive gas acrolein.

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:** Use water spray or fog for cooling exposed containers.

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

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Acrolein.

Other Information:

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: Avoid breathing (vapor, mist, spray). Avoid prolonged contact with eyes, skin and clothing.

For Non-Emergency Personnel

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

Emergency Procedures: Avoid all unnecessary exposure. Evacuate unnecessary personnel.

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. Ventilate area.

Environmental Precautions



SECTION 6: ACCIDENTAL RELEASE MEASURES

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

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 when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Contact of glycerin with strong oxidizing agents such as Nitric Acid or other strong acids, Chromium Trioxide, Potassium Chlorate, or Potassium Permanganate may cause an explosion.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

1,2,3-Propanetriol (56-81-5)		
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (mist, total particulate)
		5 mg/m³ (mist, respirable fraction)
Alberta	OEL TWA (mg/m³)	10 mg/m³ (mist)
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (mist)
		3 mg/m³ (mist-respirable)
New Brunswick	OEL TWA (mg/m³)	10 mg/m³ (mist)
Nunavut	OEL STEL (mg/m³)	20 mg/m³ (mist)
Nunavut	OEL TWA (mg/m³)	10 mg/m³ (mist)
Northwest Territories	OEL STEL (mg/m³)	20 mg/m³ (mist)
Northwest Territories	OEL TWA (mg/m³)	10 mg/m³ (mist)
Québec	VEMP (mg/m³)	10 mg/m³ (mist)
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³ (mist)
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³ (mist)
Yukon	OEL TWA (mg/m³)	30 mppcf (mist)
		10 mg/m³ (mist)



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Controls

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

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing.







Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves. Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

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 : Liquid

Appearance: Water white, clearOdor: Bland odor, sweet taste

Odor Threshold: Not availablepH: Not availableEvaporation Rate: Not availableMelting Point: $\approx 18 \,^{\circ}\text{C} (64.4 \,^{\circ}\text{F})$ Freezing Point: $275 \,^{\circ}\text{C} (527 \,^{\circ}\text{F})$

Boiling Point : > 288 °C (550.4 °F) @ 760 mmHg **Flash Point** : > 198.9 °C (390.02 °F) Closed-cup

Auto-ignition Temperature: ≈ 400 °C (752 °F)Decomposition Temperature: Not availableFlammability (solid, gas): Not applicableLower Flammable Limit: Not availableUpper Flammable Limit: Not available

Vapor Pressure : < 0.008 mm Hg @ 68° F (20° C)

Relative Vapor Density at 20°C : Not available

Relative Density : 1.262 @ 25° C (77 °F)

Specific Gravity : 1.1

Solubility : Water: Complete at 22 °C (72° F)

Ethanol: Miscible Ether: Insoluble

Acetone: Slightly soluble

Partition Coefficient: N-Octanol/Water : Not available

Viscosity : $\approx 1300 \text{ mPa·s} @ 20^{\circ} \text{ C} (68^{\circ}\text{F})$



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, and incompatible materials.

Incompatible Materials: Contact of glycerin with strong oxidizing agents such as Nitric

Acid or other strong acids, Chromium Trioxide, Potassium Chlorate, or Potassium Permanganate may cause an explosion.

Hazardous Decomposition Products: Does not decompose up to 204° C (400° F). Thermal decomposition may release acrolein.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified
LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

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: Prolonged exposure may cause irritation. **Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects. Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

1,2,3-Propanetriol (56-81-5)		
LD50 Oral Rat	12600 mg/kg	
LD50 Dermal Rabbit	> 10 g/kg	
LC50 Inhalation Rat	> 570 mg/m³ (Exposure time: 1 h)	

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Not classified.

1,2,3-Propanetriol (56-81-5)		
LC50 Fish 1	54000 (51000 - 57000) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss	
	[static])	

Persistence and Degradability

GL-96.0, GL-96.0 K		
Persistence and Degradability	Not established.	



SECTION 12: ECOLOGICAL INFORMATION

Bioaccumulative Potential

GL-96.0, GL-96.0 K		
Bioaccumulative Potential	Not established.	
1,2,3-Propanetriol (56-81-5)		
BCF Fish 1 (no bioaccumulation)		
Log Pow	-1.76	

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

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

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Water (7732-18-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
1,2,3-Propanetriol (56-81-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

US State Regulations

1,2,3-Propanetriol (56-81-5)

- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Florida Essential Chemicals List
- U.S. Idaho Occupational Exposure Limits TWAs
- RTK U.S. Massachusetts Right To Know List
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits TWAs
- RTK U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New York Occupational Exposure Limits TWAs
- U.S. North Dakota Air Pollutants Guideline Concentrations 8-Hour
- U.S. Oregon Permissible Exposure Limits TWAs
- RTK U.S. Pennsylvania RTK (Right to Know) List
- U.S. Tennessee Occupational Exposure Limits TWAs



SECTION 15: REGULATORY INFORMATION

- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits TWAs

Canadian Regulations

Water	(7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

1,2,3-Propanetriol (56-81-5)

Listed on the Canadian DSL (Domestic Substances List)

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

Date of Preparation or Latest Revision

: 09/05/2019

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous

Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

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Peter Cremer NA GHS SDS 2015

