

**DCM SHRIRAM LIMITED**  
**[Unit: SHRIRAM ALKALI & CHEMICALS]**

**Safety Data Sheet**

**GLYCERINE**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Supplier : DCM Shriram Ltd.  
(Unit: Shriram Alkali & Chemicals)  
749/GIDC, Jhagadia-393110,  
Dist- Bharuch, Gujarat.  
Phone No: (02645)222000/222015

Substance : Glycerine  
CAS No. : 56-81-5  
Synonyms : Trihydric Alcohol (C3H8O3)

**Application**

Intended Use:- Industrial use & Professional use .

Identified use:-

Refined Glycerin use as raw material for manufacturing of Epichlorohydrin.

Raw material for manufacturing of chemical derivatives used in synthesis and as a solvent.

**Glycerine is used in the food industry as a sweetener and preservative.**

It is also used in liqueurs as a thickening agent.

Another important use of Glycerine in the medical and pharmaceutical industries is as a lubricant and humectant & use in Epoxy manufacturing.

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

The product is not classified, according to the CLP regulation.

The substance is not classified according to the Globally Harmonized System (GHS).

**2.2 Label elements**

**Labelling according to Regulation (EC) No 1272/2008** Void

**Hazard pictograms** Void

**Signal word** Void

**Hazard statements** Void

**2.3 Other hazards**

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.



NFPA ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

Next Revision due on - 10/2027

Plot No. 749, GIDC Ind. Estate, Jhagadia, Dist. Bharuch, Gujarat-393110, Ph: +91-2645-222000/222015

### **SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS**

**Chemical characterization: Substances**

**CAS No. Description**

56-81-5 glycerol

**Components:**

	%
Glycerol	>99.50
Water	0.10 – 0.30

**Identification number(s)**

**EC number:** 200-289-5

**Additional information:**

Molecular formula: C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>

Molecular weight: 92.09 g·mol<sup>-1</sup>

### **SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures**

**General information** instantly remove any clothing soiled by the product.

**After inhalation** Supply fresh air.

**After skin contact** instantly, rinse with water.

**After eye contact**

Rinse opened eye for several minutes under running water (> 15 min). Then consult doctor.

**After swallowing**

Rinse out mouth and then drink plenty of water. In case of persistent symptoms, consult doctor.

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

No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available

### **SECTION 5: FIRE FIGHTING MEASURES**

**5.1 Extinguishing media**

**Suitable extinguishing agents**

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water spray jet or alcohol-resistant foam.

**For safety reasons unsuitable extinguishing agents** Water with a full water jet.

**5.2 Special hazards arising from the substance or mixture**

No further relevant information available.

**5.3 Advice for firefighters**

**Protective equipment:**

Avoid skin contact by maintaining a safe distance or wearing suitable protective clothing. Wear self-contained breathing apparatus.

**Additional information** Do not allow to enter drainage system, surface or ground water.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Do not inhale gases / fumes / aerosols.

### 6.2 Environmental precautions:

Drinking water hazard only possible if very large quantities penetrate underground and in water.

### 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

### 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment. See Section 13 for information on disposal.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

No special measures required.

### Information about protection against explosions and fires:

No special measures required.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage

Requirements to be met by store rooms and containers: No special requirements.

#### Information about storage in one common storage facility:

Keep away from foodstuffs, beverages and food.

**Further information about storage conditions:** Store in a cool place.

**Recommended storage temperature:** 25-30°C

**Storage class** 12

### 7.3 Specific end use(s)

No further relevant information available.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Components with limit values require monitoring at the workplace:

##### 56-81-5 glycerol

PEL Long-term value: 15\* 5\*\* mg/m<sup>3</sup>

\*total dust \*\*respirable fraction

TLV TLV withdrawn-insufficient data human occup. exp.

#### Exposure controls

#### Personal protective equipment:

#### General protective and hygienic measures:

Wash hands before breaks and immediately after handling the product. When using do not eat or drink.

Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothes before re-use.

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Preventive hand protection is recommended.

**Breathing equipment:**

If material is heated or sprayed, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.

**Protection of hands:**

Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms

**Material of gloves**

Butyl rubber. Polyethylene. Neoprene. Natural rubber ("latex"). Polyvinyl chloride ("PVC" or "vinyl"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl alcohol ("PVA"). Ethyl vinyl alcohol laminate ("EVAL").

**Penetration time of glove material** greater than 120 minutes

**Eye protection:** Goggles recommended during refilling.

**Body protection:** Apron

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Information on basic physical and chemical properties</b>	
<b>General Information</b>	
<b>Appearance:</b>	
Form:	clear Viscous liquid
Color:	Colorless
Odor:	Odorless
<b>Change in condition</b>	
Melting point/Melting range:	18.17 °C (65 °F) (ca. 101.3 kPa)
Boiling point/Boiling range:	290 °C (554 °F) (760 mm Hg)
Flash point:	199 °C (390 °F) (Penki-Martens closed cup)
Flammability (solid, gaseous):	Product is not flammable.
Ignition temperature:	370 °C (698 °F)
Auto igniting:	Product is not self-igniting.
Danger of explosion:	Product does not present an explosion hazard
Vapor pressure at 20 °C (68 °F):	0.1 mm
Density at 20 °C (68 °F):	1.26 g/cm³ (10.515 lbs/gal)
<b>Solubility in / Miscibility with</b>	
Water at 25 °C (77 °F):	The product is more soluble in water
<b>Partition coefficient (n-octanol/water) at 25 °C (77 °F):</b>	
	-1.75 log POW (pH=7.4)
<b>Viscosity:</b>	
Dynamic at 20 °C (68 °F):	1412 mPas
Other information	No further relevant information available.

## **SECTION 10: STABILITY AND REACTIVITY**

**Reactivity** No further relevant information available.

**Chemical stability** Stable under recommended storage conditions. Hygroscopic

**Thermal decomposition / conditions to be avoided:**

Decomposition products depend upon temperature, air supply and the presence of other materials.

Decomposition products can include and are not limited to: Acrolein.

**Possibility of hazardous reactions** Hazardous Polymerization: Will not occur.

**Conditions to avoid**

Exposure to elevated temperatures can cause product to decompose. Avoid moisture.

**Incompatible materials:** Avoid contact with: Strong oxidizers.

**Hazardous decomposition 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: Carbon monoxide. Carbon dioxide.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **Information on toxicological effects**

**Acute toxicity:**

<b>LD/LC50 values that are relevant for classification</b>		
Oral	LD 50	23000 mg/kg bw (mouse) ≥ 10000 mg/kg bw (Guinea pig)
Inhalative	LC50(7-h)	4655 mg-min/liter (rat male)

**Primary irritant effect:**

**on the skin:** No irritant effect.

**on the eye:** No irritating effect.

**Sensitization:** No sensitizing effects known.

**Subacute to chronic toxicity:**

**Repeated dose toxicity:**

The chronic toxicity of glycerin was examined in rats fed the test material in the diet at concentrations of 5, 10 and 20% for up to two years. The NOAEL was 8000-10,000 mg/kg bw based on the absence of treatment related effects in high dose animals.

**Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification.

**Carcinogenic categories**

**IARC (International Agency for Research on Cancer)** Substance is not listed.

**NTP (National Toxicology Program)** Substance is not listed.

**OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

## **SECTION 12: ECOLOGICAL INFORMATION**

### **Toxicity**

#### **Aquatic toxicity:**

<i>LC50 (48-h)</i>	<i>1955 mg/L (Daphnia magna)</i>
<i>LC50 (96-h)</i>	<i>54000 mg/L (Oncorhynchus mykiss)</i>

#### **Persistence and degradability**

Glycerine was nearly completely degraded within 24 hours.

Result: The product is readily biodegradable

#### **Behaviour in environmental systems:**

·**Bioaccumulative potential** Bioaccumulation factor:

(BCF) Value: 3.2 (predicted)

Result: Non-bioaccumulative

#### **Mobility in soil**

Soil Adsorption Coefficient =1 (Estimated)

Result: Very mobile

#### **Additional ecological information:**

#### **General notes:**

Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

#### **Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

#### **Recommendation**

Disposal must be made according to official regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Must be specially treated under adherence to official regulations.

Small amounts may be diluted with plenty of water and washed away.

#### **Uncleaned packaging:**

#### **Recommendation:**

Packaging can be reused or recycled after cleaning.

Non-contaminated packaging can be used for recycling.

Empty contaminated packaging thoroughly. They can be recycled after thorough and proper cleaning.

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**SECTION 14: TRANSPORT INFORMATION**

**Hazchem Code** No Hazchem Code allocated

**SECTION 15: REGULATORY INFORMATION**

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

**Sara**

**Section 355 (extremely hazardous substances):** Substance is not listed.

**Section 313 (Specific toxic chemical listings):** Substance is not listed.

**TSCA (Toxic Substances Control Act):** Substance is listed.

**Proposition 65**

**Chemicals known to cause cancer:** Substance is not listed.

**Chemicals known to cause reproductive toxicity for females:** Substance is not listed.

**Chemicals known to cause reproductive toxicity for males:** Substance is not listed.

**Chemicals known to cause developmental toxicity:** Substance is not listed.

**Carcinogenic categories**

**EPA (Environmental Protection Agency)** Substance is not listed.

**TLV (Threshold Limit Value established by ACGIH)** Substance is not listed.

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

**GHS label elements** Not applicable

**Hazard pictograms** Not applicable

**Signal word** Not applicable

**Hazard statements** Not applicable

**National regulations:**

**Other regulations, limitations and prohibitive regulations**

EU- Listed

Canada-DSL – Listed

China-NEPA (IECSC) –

Listed New Zealand

(NZIoC) – Listed

Australia- AICS –Not

Listed Japan MITI-Listed

Philippine PICSS-Listed

**Chemical safety assessment:** A Chemical Safety Assessment is not applicable



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**SECTION 16: OTHER INFORMATION**

Name of the firm	Mailing Address	Contact Person in Emergency	Telephone no.
Shriram Alkali & Chemicals (SAC)	749, GIDC Estate Jhagadia. Pin-393110 Dist: Bharuch	Head of Production	Telephone NOS : 02645-222000/222015

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