



# SAFETY DATA SHEET

According to Safe Work Australia

Printing date 28.08.2014

Revision: 28.08.2014

## 1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product Name:** GLYCERINE 99.5% USP

**Other Name:**

Glycerin; glycerine; glycerine anhydrous; glyceritol; glycerol; glycolic alcohol; glycol alcohol; 1,2,3-propanetriol; Propane-1,2,3-triol; trihydroxypropane; 1,2,3-trihydroxypropane

**Recommended Use of the Chemical and Restriction on Use:** Emollient and an iodophor diluent

**Details of Manufacturer or Importer:**

DASCO Pty Ltd  
24 - 26 Helen Street  
Heidelberg Heights VIC 3081

**Phone Number:** (03) 9459 7004

**Emergency telephone number:** 13 11 26 (Poisons Information Centre)

## 2 . HAZARDS IDENTIFICATION

**Hazardous Nature:** The substance is not classified as hazardous according to the Globally Harmonized System (GHS).

**Label Elements**

**Signal Word** Void

**Hazard Statements** Void

## 3 . COMPOSITION AND INFORMATION ON INGREDIENTS

**Chemical Characterisation: Substances**

**CAS No. Description**

56-81-5 1,2,3-Propanetriol 99.5% min.

## 4 . FIRST AID MEASURES

**Inhalation:** If inhaled, remove to fresh air. Seek medical attention if breathing problems develop.

**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

**Eye Contact:**

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

**Ingestion:** If swallowed, do not induce vomiting. Seek medical attention if symptoms occur.

**Information for Doctor**

**Symptoms Caused by Exposure:**

Inhalation: May cause respiratory irritation and coughing. Inhalation of hot vapours may cause nausea. Inhalation of combustion products, which may include acrolein, may cause serious effects, including severe irritation, shortness of breath, spasm and pulmonary oedema (fluid build up in lungs).

Eye Contact: May cause eye irritation, redness and pain.

Ingestion: May cause headache, nausea, vomiting, diarrhoea, insomnia, fever, haemoglobinuria, convulsions, paralysis, elevated blood sugar and diabetic coma. Very large doses may cause irritation and dehydration of the tissues, haemolysis and renal failure

## 5 . FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Alcohol-resistant foam or dry agent.

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**Specific Hazards Arising from the Chemical:**

Combustible liquid class 2. Contact with strong oxidising agents may cause fire or explosion. Mixtures with hydrogen peroxide are explosive. Reaction with concentrated nitric and sulphuric acids may produce nitroglycerine, a shock-sensitive explosive. Aerosols may become flammable at temperatures below the flash point.

Hazardous combustion products include oxides of carbon and noxious fumes which may include acrolein.

**Special Protective Equipment and Precautions for Fire Fighters:**

Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

## 6 . ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear Safe Work Australia approved full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

## 7 . HANDLING AND STORAGE

**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in original container in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Hygroscopic, will absorb moisture from the air. Protect from physical damage, direct sunlight, heat, sparks, open flames and hot surfaces. Keep away from oxidising agents, hydrogen peroxide, strong mineral acids and acetic anhydride.

## 8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Exposure Standards:**

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

NES | TWA: 10 mg/m<sup>3</sup>**Engineering Controls:**

Ensure adequate ventilation of the workplace. If handling industrial quantities, or if vapour/aerosol risk exists, provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour as low as possible, at least below the occupational exposure limits.

**Personal Protective Equipment (PPE):****Respiratory Protection:**

Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. See Australian Standards AS/NZS 1715 and 1716 for more information.

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**Skin Protection:**

Rubber or plastic gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Impervious overalls, plastic apron, sleeves and boots should be worn when handling industrial quantities. See Australian/New Zealand Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

## 9 . PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:**

<b>Form:</b>	Viscous liquid
<b>Colour:</b>	Clear, colourless
<b>Odour:</b>	Almost odourless
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	Neutral
<b>Melting point/Melting range:</b>	18.6 °C
<b>Initial Boiling Point/Boiling Range:</b>	290 °C
<b>Flash Point:</b>	160 °C
<b>Flammability:</b>	Combustible Liquid Class 2
<b>Auto-ignition Temperature:</b>	370 °C
<b>Decomposition Temperature:</b>	171 °C
<b>Explosion Limits:</b>	
<b>Lower:</b>	0.9 %
<b>Upper:</b>	No information available
<b>Vapour Pressure at 50 °C:</b>	0.0025 mm Hg
<b>Density:</b>	No information available
<b>Relative Density at 20 °C:</b>	1.26 g/mL
<b>Vapour Density:</b>	3.17 (Air = 1)
<b>Evaporation Rate:</b>	No information available
<b>Solubility in Water:</b>	Miscible in all proportions
<b>Solubility in Solvents:</b>	Soluble in diethyl ether, ethanol and ethyl acetate. Insoluble in benzene, carbon disulphide, carbon tetrachloride and chloroform.
<b>Partition Coefficient (n-octanol/water):</b>	No information available
<b>% Volatiles by Volume:</b>	<1 %
<b>VOC:</b>	<1 %

## 10 . STABILITY AND REACTIVITY

**Possibility of Hazardous Reactions:**

Reaction with mixed concentrated nitric and sulphuric acids may produce nitroglycerine, a shock-sensitive explosive. Mixtures with hydrogen peroxide are explosive. Contact with strong oxidising agents may cause fire or explosion. Violent reactions with acetic anhydride in the presence of a catalyst.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.

**Conditions to Avoid:**

Heat, sparks, open flames, hot surfaces and direct sunlight. Hygroscopic, will absorb moisture from the air.

**Incompatible Materials:**

Oxidising agents, hydrogen peroxide, concentrated mineral acids and acetic anhydride.

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**Hazardous Decomposition Products:** Decomposes on heating to produce acrolein.

## 11 . TOXICOLOGICAL INFORMATION

**Toxicity:****LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:****56-81-5 1,2,3-Propanetriol**

Oral	LC <sub>50</sub> /1 h	>570 mg/m <sup>3</sup> (rat)
	LD <sub>50</sub>	12600 mg/kg (rat)
		4090 mg/kg (mouse)
Dermal	TDL <sub>0</sub>	1428 mg/kg (human)
	LD <sub>50</sub>	>10000 mg/kg (rabbit)

**Acute Health Effects****Inhalation:**

May cause respiratory irritation and coughing. Inhalation of hot vapours may cause nausea. Inhalation of combustion products, which may include acrolein, may cause serious effects, including severe irritation, shortness of breath, spasm and pulmonary oedema (fluid build up in lungs). Onset of symptoms may be delayed.

**Skin:** May cause irritation and dry skin.

**Eye:** May cause eye irritation, redness and pain.

**Ingestion:**

May cause headache, nausea, vomiting, diarrhoea, insomnia, fever, haemoglobinuria, convulsions, paralysis, elevated blood sugar and diabetic coma. Very large doses may cause irritation and dehydration of the tissues, haemolysis and renal failure.

**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.

**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.

**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.

**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.

**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.

**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.

**Chronic Health Effects:**

Repeated or prolonged skin contact may lead to dry skin and irritation. Chronic over-exposure to glycerol may affect the blood and kidneys.

Over-exposure to vapours or aerosols may lead to symptoms similar to ingestion, including elevated blood sugar and diabetic coma.

**Existing Conditions Aggravated by Exposure:**

Skin and eye disorders and compromised liver or kidney function.

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## 12 . ECOLOGICAL INFORMATION

**Ecotoxicity:** No information available**Aquatic toxicity:** No information available**Persistence and Degradability:** No information available**Bioaccumulative Potential:** Not expected to bioaccumulate.**Mobility in Soil:** No information available

## 13 . DISPOSAL CONSIDERATIONS

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

## 14 . TRANSPORT INFORMATION

**UN Number** Not regulated**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated

## 15 . REGULATORY INFORMATION

**Australian Inventory of Chemical Substances:**

56-81-5 | 1,2,3-Propanetriol

## 16 . OTHER INFORMATION

**Creation Date:** 28.08.2014**Last Revision of MSDS:** 01.09.2009**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)**Abbreviations and acronyms:**

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds

LC<sub>50</sub>: Lethal concentration, 50 percentLD<sub>50</sub>: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

**Disclaimer**

This MSDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011"

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