

GLYCERINE

1 – PRODUCT AND COMPANY INFORMATION

RECOMMENDED USES: Industrial, Lubricants, Personal Care, Food Additives, Surfactants

SUPPLIER: Deosan Manufacturing Ltd
20 Seddon Street
WAHAROA
NEW ZEALAND

Telephone: 0800 336 726 (0800 DEOSAN) / +64 7 888 5628

Email: info@deosan.co.nz

24 Hour Emergency Contact: 0800 243 622 (CHEMCALL)

International Emergency Number: +64 4 917 9888

New Zealand Poison Centre: 0800 POISON (0800 764 766)

NZ Emergency Services: 111

2 – HAZARDS IDENTIFICATION

NON-HAZARDOUS SUBSTANCE.

Not classified as hazardous according to criteria in the New Zealand Hazardous Substances and New Organisms legislation and GHS 7th Edition.

HAZARD LABELLING: N/A

GHS CLASSIFICATION

- None

HSNO Classification: None

GHS HAZARD STATEMENTS

Physical Hazards: None

Health Hazards: None

Environmental Hazards: None.

PREVENTION

- Wear eye protection.
- Avoid release to the environment.

GLYCERINE

RESPONSE

- If medical advice is needed, have product container or label at hand.
- IF SWALLOWED: Non-Hazardous.
- IF ON SKIN (or hair): Contact with skin may cause irritation in some people. Remove all contaminated clothing. Rinse skin with water/shower until no more irritation.
- IF INHALED: Non-Hazardous.
- IF IN EYES: Contact with eyes may cause irritation. Immediately flush eyes with flowing water including under the eyelids for at several minutes. If irritation persists, seek medical assistance.
- Immediately call a POISON CENTER or doctor/physician if unwell.
- Wash contaminated clothing before reuse.

STORAGE

- Store only in original container.
- Store locked up.

DISPOSAL

Dispose of contents and packaging in accordance with relevant legislation. See Section 13 of this SDS Document for more information.

3 – COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients: None

SYNONYMS: Glycerin, Glycerol.

4 - FIRST AID MEASURES

IN AN EMERGENCY CALL AN AMBULANCE (111).

Primary routes of exposure by contact with skin or eyes.

MAIN SYMPTOMS CAUSED BY EXPOSURE

Exposure may cause allergic reactions (typically a skin rash) in some people. More severe reactions are very rare but will require urgent medical attention should they occur.

SWALLOWED

Non-hazardous. Do not induce vomiting. Drink a large glass of water.

First aid is not generally required. If in doubt, contact a Poison Centre (0800 764766) or a doctor.

EYE CONTACT

Will cause irritation or discomfort.

Immediately hold eyelids apart and flush the eye continuously with running water.

Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

GLYCERINE

If eye irritation persists, seek medical advice/attention. Continue rinsing until advised to stop by the Poison Centre or a doctor.

Removal of contact lenses after an eye injury should be undertaken by skilled personnel.

SKIN CONTACT

If irritation or rash occurs, remove contaminated clothing and thoroughly wash skin and hair with running water and soap.

Seek medical attention if irritation persists.

INHALATION

Non-Hazardous.

NOTES TO PHYSICIAN

Treat symptomatically based on individual reactions of patient and judgement of doctor.

5 – FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions: water, water spray, dry powder, foam, carbon dioxide (CO₂).

FIRE FIGHTING

Alert Fire Brigade and tell them location and nature of hazard. Clear fire area of all non-emergency personnel.

Prevent, by any means available, spillage from entering drains or water course. Use firefighting procedures suitable for surrounding area.

Equipment should be thoroughly decontaminated after use.

SPECIFIC HAZARDS

Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers.

FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents e.g., nitrates, oxidising acids, chlorine compounds etc. as ignition may result.

DECOMPOSITION

On combustion, may emit toxic fumes of carbon monoxide (CO). May emit acrid smoke. Mists containing combustible materials may be explosive. Combustion products include carbon dioxide (CO₂), other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes.

PERSONAL PROTECTIVE EQUIPMENT

Fire-fighters should wear full protective clothing suitable for chemical hazards with self-contained breathing apparatus. The substance must be contained and prevented from entering drains and water courses in all circumstances.

HAZCHEM CODE

None

GLYCERINE

6 – ACCIDENTAL RELEASE MEASURES

Wear protective gloves, clothing and eye/face protection.

Keep unnecessary people away from the hazardous area.

MINOR SPILLS

Clean up all spills immediately.

Very Slippery when spilt.

Remove all ignition sources.

Avoid breathing vapours and contact with skin and eyes.

Control personal contact by using protective equipment.

Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable labelled container for waste disposal.

MAJOR SPILLS

Very Slippery when spilt.

Clear area of personnel.

Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water course.

Remove all ignition sources.

Increase ventilation.

Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling.

Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal.

Wash area and prevent runoff into drains. If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice - See Section 8 of the SDS

7 – HANDLING AND STORAGE

PROCEDURE FOR HANDLING

Operators should be trained in procedures for safe use of this material.

Contact lenses should not be worn when working with this chemical.

Avoid all personal contact. Implement controls to reduce risk of exposure, such as closed systems and isolated operations.

Wear eye protection. Use appropriate personal protective equipment. See section 8 of the SDS.

When handling, DO NOT eat, drink or smoke.

Keep containers securely sealed when not in use. Avoid physical damage to containers.

Use good occupational work practice. Always wash hands with soap and water after handling.

GLYCERINE

SUITABLE PACKAGING

The UN Packaging specification number as well as the UN packaging Logo is to be printed on the containers. Store product in original packaging.

Corrosive resistant Plastic (HDPE) drum

Check all packaging is clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

None.

STORAGE REQUIREMENTS

Store locked up.

Store in original containers.

Keep containers securely sealed to protect from moisture contamination. Store in a cool, dry, well-ventilated area.

Store away from foodstuff containers.

Protect containers against physical damage and check regularly for leaks.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

No exposure limits set by WorkSafe New Zealand.

ENGINEERING CONTROLS

No specific engineering controls are needed.

VENTILATION SYSTEM

No specific ventilation systems are required.

PERSONAL PROTECTION EQUIPMENT (PPE)

When handling product always wear PVC protective gloves and eye protection. Protective clothing, Chemical/waterproof boots and chemical resistant apron also recommended.

PERSONAL RESPIRATORS

Not required

SKIN PROTECTION

People with an allergy to glycerine should wear impervious protective clothing, including chemical resistant boots, gloves, apron or overalls as appropriate to prevent skin contact. Refer to AS/NZS 2161.1:2016 Occupational Protective Gloves – Selection, use and maintenance; AS/NZS 2210.1:2010 for Safety footwear; AS/NZS 4501.1:2008 Occupational protective clothing – Guidelines on the selection, use, care and maintenance of protective clothing.

EYE PROTECTION

Use approved chemical safety goggles and a full-face shield. Refer to Personal eye protection Part 1: Eye and face protectors for occupational applications, Australian/New Zealand Standard: AS/NZS 1337.1:2010. Ensure that there is ready access to eye wash unit.

GLYCERINE

9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Colourless, very viscous liquid.

PHYSICAL PROPERTIES

PROPERTY	VALUE
State:	Liquid
Odour:	None
Molecular Weight:	92.1
Melting Range (°C):	18°C
Boiling Range (°C):	290°C
Solubility in water (g/L, 20°C):	Miscible
pH:	~ 7.0
Specific Gravity (g/ml):	1.2 – 1.3
Bulk Density (kg/m ³):	~1260
Volatile Component (%vol, 21°C):	0
Relative Vapor Density (air=1):	3.17
Vapour Pressure (hPa, 1175°C):	<0.1
Autoignition Temp (°C):	370
Flash Point (°C):	160
Lower Explosive Limit (%):	3
Upper Explosive Limit (%):	19
Decomposition Temp (°C):	290
Viscosity (cps):	Not available
Evaporation Rate:	Non volatile

10 – CHEMICAL STABILITY AND REACTIVITY

CHEMICAL STABILITY

Product is stable under normal conditions of use, storage, and temperature.

CONDITIONS TO AVOID

Avoid excessive heat, direct sunlight, moisture, high temperatures. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

INCOMPATIBLE MATERIALS

Avoid reaction with strong oxidising agents, alkali metal hydrides, potassium chlorate and potassium permanganate as an explosive or violent reaction may occur.

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition can lead to release of Acrolein if heated above 280°C.

HAZARDOUS REACTIONS

Hazardous polymerization will not occur.

GLYCERINE

11 – TOXICOLOGICAL INFORMATION

SWALLOWED

Virtually nontoxic after a single ingestion. May cause nausea.

EYE

Prolonged eye contact may cause inflammation characterised by a temporary redness of the conjunctiva (similar to windburn).

SKIN

Skin contact is not expected to have harmful health effects.

INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract.

CHRONIC HEALTH EFFECTS

N/A

TOXICITY AND IRRITATION DATA

TOXICITY

Acute Oral Toxicity, Rat, LD50: 12,600 mg/Kg

Acute Dermal Toxicity, LD50: >4,000 mg/Kg.

Acute Inhalation Toxicity, LC50: Not available.

IRRITATION

The material may be irritating to the eye, with prolonged contact causing inflammation.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (non-allergic).

Sensitisation (respiratory/contact): No evidence for skin sensitization.

Carcinogenic effects: Not classified or listed by IARC, NTP, or Cal Prop65.

Mutagenic effects: Not expected to be mutagenic.

Reproductive or developmental effects: Not expected to cause adverse reproductive effects.

Aspiration hazard: No information available.

Specific target organ toxicity: No information available.

12 – ECOLOGICAL INFORMATION

ECOTOXICITY

Non-Hazardous in the Aquatic Environment.

ECOTOXICITY DATA

Fish, (*Carassius auratus*), 24hr LC50: >5000 mg/L.

Crustacean, (*Daphnia magna*), 24hr EC50: >10000 mg/L.

Algae IC50: >2900 mg/l Bacteria EC50: >10000 mg/l (*Pseudomonas putida*).

GLYCERINE

Persistence and Degradability

DOD5: 82% of ThOD and 86% of COD.

Readily biodegradable: Readily biodegradable under aerobic conditions.

Mobility

Completely soluble.

Environmental Fate (Exposure)

100% of glycerine is expected to end up in the water phase.

Bioaccumulative Potential

Log Kow: -1.76. Glycerine is expected to have a low potential for sorption to soil and is not expected to bioaccumulate.

Calculated bioconcentration factor: 3.162.

DO NOT discharge into sewer or waterways.

13 – DISPOSAL INFORMATION

PRODUCT

Return unwanted product to the manufacturer for disposal or contact the Regional Council for local chemical disposal area details.

Treatment in a biological wastewater treatment system with prior approval and arrangement is also permissible providing that the substance is rendered non-hazardous and does not pose any adverse effects to human health or the environment.

Alternatively consult an approved Waste Management company for disposal options.

PACKAGING

NZ: Triple-rinse empty containers. Contact AgRecovery to arrange for pick-up or drop-off at a collection depot.

Overseas: Triple-rinse empty containers. Dispose of containers in accordance with guidance/regulations from relevant local authorities.

Observe all label safeguards until containers are cleaned and destroyed.

Where possible retain label warnings and SDS and observe all notices pertaining to the product.

14 – TRANSPORT INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

Not classified as a Dangerous Good under NZS 5433:2007 Transport of Dangerous Goods on Land.

15 – REGULATORY INFORMATION

REGULATIONS

Non-hazardous

GLYCERINE

Glycerine CAS Number 56-81-5 is listed in the New Zealand Inventory of Chemicals.

Glycerine (CAS: 56- 81- 5) is found on the following regulatory lists; CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP. IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances International Council of Chemical Associations (ICCA) - High Production Volume List. New Zealand Workplace Exposure Standards (WES). OECD Representative List of High Production Volume (HPV) Chemicals.

SECTION 16 – OTHER INFORMATION

INTERPRETATION AND ABBREVIATIONS

EPA - The Environmental Protection Authority of New Zealand

HSNO - Hazardous Substances and New Organisms Act 1996

MPI - Ministry for Primary Industries

EINECS - European Inventory of Existing Commercial Chemical Substances.

ENCS - Japanese Existing and New Chemical substances.

ERPG - Emergency Response Planning Guidelines.

GHS - Globally Harmonized System of Classification and Labelling of Chemicals.

IARC - International Agency for Research on Cancer.

SOURCES OF KEY DATA USED TO COMPILE THE DATASHEET:

Manufacturer's SDS, NZ EPA, CCID

DISCLAIMER: *The information contained in this safety data sheet was obtained from current and reliable sources. This data is supplied without warranty, expressed or implied, regarding its correctness and accuracy. It is the user's responsibility to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense resulting from improper use of this product.*

Deosan recommends that if this sheet is kept in hard copy that the user check www.deosan.co.nz/safety-data-sheets/ monthly to ensure it is still current.