

MATERIAL SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF SUPPLIER

Product name:

Glycerine 99.5%, Glycerine 99.7% (USP/BP)

Trade name

Glycerine 99.5%, Glycerine 99.7% (USP/BP)

Recommended uses:

Raw material for manufacturing oleochemical derivatives for Pharmaceutical, food, cosmetic and industrial use.

SECTION 2. HAZARDS IDENTIFICATION

Product is non-hazardous

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

General chemical description:

Glycerine , 1,2,3 –Propanetriol , formula C₃ H₈ O₃

CAS-number:

56-81-5

EINECS- number:

200-289-5

SECTION 4. FIRST-AID MEASURES

When inhaled:

Remove to fresh air. If suffocation is serious take to a doctor

When in contact with skin:

Use gloves

Absorb water from skin/body if contacted for too long

Remove contaminated clothing, wash skin with water and soap

When in contact with eyes:

Use face shield
Flush with water, take to a doctor if necessary

When ingested:

Diarrhoea, headache, nausea
Rinse mouth, drink plenty of water, see physician

Protection of fire-fighters (use of protective equipment, etc.):

Use self-contained breathing equipment if in confined place

SECTION 6. ACCIDENT RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use gloves, face shield

Environmental precautions:

Do not allow to flow into drainage system.

Methods and materials for containment and cleaning up:

Collect leakage in sealable containers, soak up with sand or other inert absorbent and remove to safe place. Flush away remainder with water.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Use gloves and wear goggles when handling.

Conditions for safe storage, including any incompatibilities:

Keep in a cool and dry place, avoid extreme heat and cold.
Avoid direct fire. Keep separate from oxidants.
Store in clean, dry, preferably stainless steel vessels.
In bulk, store at ambient temperature. For pumping, heat up to above 60 deg C.
Temperature higher than necessary degrades quality at rate dependent on time and temperature of exposure. Exposure to ultraviolet light, especially sunlight must be minimised to prevent quality loss.

SECTION 8. EXPOSURE CONTROLS /PERSONAL PROTECTION

Control parameters:

None

Appropriate engineering controls:

No special measures required.

Individual protection measures, such as personal protective equipment (PPE):

Immediately remove soiled or soaked clothing.
Hand protection : suitable protective gloves.
Eye protection : protective goggles.
Body protection : suitable protective clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colourless, hygroscopic & viscous liquid. (become very viscous at temperature -10 deg C and below)
Odour	Slight Milky to Odourless
Odour threshold	Not available
pH	Not available
Melting point / freezing point	18 - 22
Initial boiling point and boiling range	290 - 295 °C @ 760mm Hg
Flash point	>180 °C
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Not available
Vapour pressure	0.0025 mbar @ 50°C
Vapour density	3.2 (relative, air=1)
Relative density	1.0 @ 20 °C at saturated mixture vapour/air (air=1)
Solubility	Infinite g/100 ml in water @ 20 °C
Partition coefficient: n-octanol/water	-2.6
Auto-ignition temperature	400 °C (Cleveland closed cup)
Decomposition temperature	Not available
Viscosity	Not available
Density @ 20 °C	1.2635 – 1.2651 g/ml
Relative molecular mass	92.1

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

Vapour mixes readily with air.

Chemical stability:

Able to polymerise above 149 deg C. Decomposes when heated above 290 deg C

Possibility of hazardous reactions:

None known

Conditions to avoid:

None known

Incompatible materials:

Reacts violently with strong oxidants

Hazardous decomposition products:

Low toxicity and not considered hazardous to human beings

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity:

LD50 (Oral, rat) = >12600 mg/kg

LC50 (Inhalation, rat) = >570mg/m³/1Hr

Skin corrosion/irritation:

LD50 rabbit >10 gm/kg, not irritating (Draize test)

Serious eye damage/irritation:

Not irritating (OECD 405)

Respiratory or skin sensitization:

No sensitization reactions.

Germ cell mutagenicity:

Not mutagenic (Ames test)

Carcinogenicity:

Not available

Reproductive toxicity:

Not available

STOST-single / repeated exposure:

Not available

Aspiration hazard:

Not available

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity:

Acute fish toxicity: LC 50 > 10000 mg product/l.
Carp, LC50: >1000mg/L (48h);

Acute bacteria toxicity: EC 50 > 10000 mg product/l.
Daphnia magna, EC50: >1000mg/L (3h)

Persistence and degradability:

Readily biodegradable, OECD 301

Bioaccumulative potential:

Log P octanol /water = -2.6

Mobility in soil:

Not available

Other adverse effect:

Not available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal method:

Waste incineration with the approval of the responsible local authority

SECTION 14. TRANSPORT INFORMATION

UN Number:

None

UN Proper Shipping Name:

None

Transport Hazard Class:

Not hazardous according to RID/ADR, GGVS/GGVE, ADN, IMDG,
ICAO-TI/IATA-DGR

Packing Group:

None

Environmental Hazard:

Marine pollutant (Yes/No): No
MARPOL Annex II: Category Z

SECTION 15. REGULATORY INFORMATION

Classification and labelling according to GHS:

None

Classification and labelling according to EC:

None

SECTION 16. OTHER INFORMATION

Always work safely around open hatches on bulk tanks. The low density makes flotation difficult for immersed person.

Disclaimer

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