DUDA ENERGY LLC

Safety Data Sheet
GLYCERINE 99.7% USP KOSHER ADM MTL

SECTION 1: Identification

1.1 Product identifier

Product name	GLYCERINE 99.7% USP KOSHER ADM MTL
Product number	Not available
Brand	Not available
Substance name	GLYCEROL
EC no.	200-289-5
CAS no.	56-81-5

1.2 Other means of identification

None

1.3 Recommended use of the chemical and restrictions on use

This compound is used as a food additive, ingredient of some linctuses and pastilles, sweetening agent, emollient, with dried magnesium sulphate used in the treatment of septic wounds and boils, lubricating gastroscopes, preservative in some pharmaceutical preparations and in certain biological preparations and in non-alcoholic extracts and tinctures. It is used in plasticizer manufacturing, confectionary, dynamite, nitroglycerine, antifreeze, antibiotics,rollers and lectographs, solvent, cosmetics, humectant, liquid soaps,liqueurs,blacking, printing and copying inks, elastic glues, lead oxide cements, to keep fabrics pliable, to preserve printing on cotton, hectographs, to keep frost from windshields, in shock absorber fluids, in fermentation of nutrients,demulcent, an oral osmotic diuretic to manage cerebral edema, reduce cerebrospinal fluid pressure and lower intraocular pressure, raw material for alkyd resins, cellophane, ester gums, perfumery, bacteriostat, penetrant, polyurethane polyols, emulsifying agent, rubber stamp inks, laxative, reducing intracranial pressure and promotes peristalsis evacuation of the lower bowel. In veterinary medicine, it used in the treatment of bovine ketosis, pregnancy toxaemia in sheep, pharmaceutical aid (humectant, solvent) emollient and emulcent.

1.4 Supplier's details

Name	Duda Energy LLC
Address	1112 Brooks St. Decatur, AL 35601 USA
Telephone	256.340.4866
Fax	Not available
email	Not available

1.5 Emergency phone number(s)

800.255.3924 (Chemtel)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: UN GHS rev. 5

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification
Not available

Statement regarding ingredients of unknown toxicity
Not available

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name	GLYCEROL
EC no.	200-289-5
CAS no.	56-81-5
Formula	C3H8O3
Molecular weight	92.09
Other names / synonyms	Glycerin, U.S.P.; 1,2,3-TRIHYDROXYPROPANE; GLYCERINE
Impurities and stabilizing additives	Not available

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Limit the risk of exposure to material when preforming first aid.
If inhaled	Get some fresh air. Call a physician if symptoms develop or persist.
In case of skin contact	Wash off with soap and water. Get medical attention if irritaiton develops or persists.
In case of eye contact	Rinse with water. Get medical attention if irritation develops or persists.

If swallowed	DO NOT INDUCE VOMITING. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and IMMEDIATELY call a hospital or poison control center. Be prepared to transport the victim to a hospital if advised by a physician. If the victim is convulsing or unconscious, do not give anything by mouth, ensure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. DO NOT INDUCE VOMITING. IMMEDIATELY transport the victim to a hospital.

Personal protective equipment for first-aid responders

Not available

4.2 Most important symptoms/effects, acute and delayed

Headache, nausea, vomiting.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Alcohol resistant foam. Dry powder. Carbon dioxide (CO_2).

5.2 Specific hazards arising from the chemical

Hazardous gases may form during fire.

5.3 Special protective actions for fire-fighters

Use self-contained breathing apparatus and full protective clothing.

Further information

Not available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away.

6.2 Environmental precautions

Avoid discharge into drains, water ways, or onto the ground.

6.3 Methods and materials for containment and cleaning up

If you should spill this chemical, use absorbent paper to pick up all liquid spill material. Seal the absorbent paper, as well as any of your clothing which may be contaminated, in a vapor-tight plastic bag for eventual disposal. Wash any surfaces you may have contaminated with a soap and water solution.

Reference to other sections

None

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Observe good hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities
Store in original tightly closed container. Store away from incompatible materials.

Specific end use(s)
Not available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Glycerin (mist), Respirable fraction (CAS: 56-81-5)
PEL (Inhalation): 5 mg/m3, PNOR (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

2. Glycerin (mist), Respirable fraction (CAS: 56-81-5)
PEL (Inhalation): 5 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

3. Glycerin (mist), Total dust (CAS: 56-81-5)
PEL (Inhalation): 10 mg/m3 , PNOR (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

4. Glycerin (mist), Total dust (CAS: 56-81-5)
PEL (Inhalation): 15 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

5. Glycerin (mist) (CAS: 56-81-5)
REL (Inhalation): See Appendix D (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

6. Glycerin (mist) (CAS: 56-81-5)
PEL (Inhalation): PNOR (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls
Provide good general ventilation when or where airborne levels may excede recommended exposure limits.

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

Eye/face protection
Wear goggles or a full-face splash guard.

Skin protection
Wear Nitrile gloves (min thick: 0.11mm) and long sleeves to avoid unwanted exposure.

Body protection
Chemical resistant protective clothing should be worn when handling. Chemical resistant gloves should be worn when handling.

Respiratory protection

Where fume/vapor levels are above exposure limits, use a respirator with organic vapor/acid gas cartridges.

Thermal hazards
Not available

Environmental exposure controls
Not available

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Liquid
Odor	Odorless
Odor threshold	Not available
pH	Not available
Melting point/freezing point	17.8 °C
Initial boiling point and boiling range	290 °C
Flash point	160 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper/lower flammability limits	Not available
Upper/lower explosive limits	Not available
Vapor pressure	0.0025 mm Hg @ 50 °C [043,051,055]; 40 mm Hg @ 198 °C [051]
Vapor density	3.17 [043,051,055]
Relative density	1.2613 @ 20 °C [017,047]
Solubility(ies)	Miscible (Water)
Partition coefficient: n-octanol/water	-1.76
Auto-ignition temperature	370 °C
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidizing properties	Not available

SECTION 10: Stability and reactivity

10.1 Reactivity
This product is stable and non-reactive under normal conditions of use, storage, and transport.

10.2 Chemical stability
Material is stable under normal conditions.

10.3 Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid
Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products
No hazardous decomposition products are known.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Not available

Skin corrosion/irritation
Prolonged contact with skin may cause temporary irritation.

Serious eye damage/irritation
Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization
Not a respiratory sensitizer.
This product is not expected to cause skin sensitization.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Summary of evaluation of the CMR properties
Not available

STOT-single exposure
Not available

STOT-repeated exposure
Not available

Aspiration hazard
Not an aspiration hazard.

Additional information
None.

SECTION 12: Ecological information

Toxicity
This product is not classified as environmentally hazardous. However, this does not exclude the possiblity that large or frequent spills can have a harmful or damaging effect on the environment.

GLYCEROL
LC50 - Oncorhynchus mykiss (rainbow trout) - 51000 - 5700 mg/l - 96 hours

Persistence and degradability
Not available

Bioaccumulative potential
Not available

Mobility in soil
Not available

Results of PBT and vPvB assessment
Not available

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

Disposal of the product
Collect and reclaim or dispose in sealed containers at a licensed waste disposal site.

Disposal of contaminated packaging
Emptied containers may retain product residue - follow label warnings even after container is emptied. Emptied containers should be taken to an approved waste handling site for disposal or recycling.

Waste treatment
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Sewage disposal
Dispose of in accordance with all local regulations.

Other disposal recommendations
Dispose of in accordance with all local regulations.

SECTION 14: Transport information

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

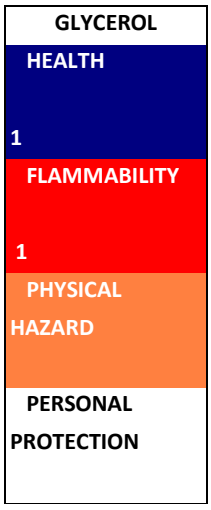
15.1 Safety, health and environmental regulations specific for the product in question

Pennsylvania Right To Know Components
Chemical name: 1,2,3-Propanetriol
CAS number: 56-81-5

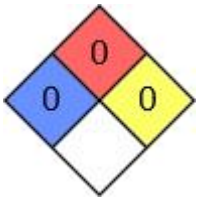
New Jersey Right To Know Components
Common name: GLYCERIN
CAS number: 56-81-5

15.2 Chemical Safety Assessment
Not available

HMIS Rating



NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer
The information provided in this Safety Data Sheet is correct to the best of Duda Energy LLC's knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This Safety Data Sheet only contains information relating to safety and does not replace any product information or product

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16.2 Preparation information

Version: 2
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