



SECTION 1 - Chemical Product and Company Identification

1.1 Product Identifiers

Product Name: : Glycerin
 CAS #: : 56-81-5
 EC #: : 200-289-5
 RTECS #: : MA8050000
 REACH Registration Number : Not available

1.2 Recommended Use of the Chemical and Restrictions of Use

Chemical Manufacturing

1.3 Supplier Details

Supplier: BioSpectra, Inc. 100 Majestic Way
 Bangor, PA 18013
 T: 610.599.3400
ra@biospecta.us

1.4 Emergency Numbers

Emergency number: US & Canada: 1-800-424-9300
 Outside the US & Canada: +1 703-527-3887

SECTION 2 – Hazard Identification

2.1 Classification of Substance or Mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Not a hazardous substance or mixture according to Globally Harmonized System (GHS) and Regulation (EC) No 1272/2008.

2.2 GHS Label Elements Including Precautionary Statements

Not a hazardous substance or mixture.

2.3 Hazards not Classified or not Covered by the GHS

None

SECTION 3 – Composition, Information on Ingredients

Component	Classification	Concentration
Glycerin	Not a hazardous substance or mixture	<=100%

Synonyms : 1,2,3-Propanetriol, Glycerol
 EC Number : 200-289-5
 CAS Number : 56-81-5
 Molecular Formula : C₃H₈O₃
 Molecular Weight : 92.09 g/mol

SECTION 4 – First Aid Measures

4.1 Description of Necessary First Aid Measures

Eyes : Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Remove Contact Lenses. Seek medical attention if needed.

Skin	: Take off contaminated clothing immediately. Rinse contaminated area with plenty of water for at least 15 minutes. Seek medical attention if needed.
Ingestion	: Immediately drink plenty of water. DO NOT induce vomiting unless instructed to do so by a medical professional. Never give anything by mouth to an unconscious person. Seek medical attention if needed.
Inhalation	: Remove from exposure to fresh air immediately. Seek medical attention if needed.
Notes to Physician	: Treat symptomatically and supportively.

4.2 Most Important Symptoms/Effects, Acute and Delayed

Refer to Section 11 for additional Toxicological information

4.3 Indication of Immediate Medical Attention and Special Treatment

Treat symptomatically

SECTION 5 - Firefighting Measures

5.1 Extinguishing Media

Water Foam, Carbon Dioxide (CO₂), Dry Powder

5.2 Specific Hazards Associated with this Chemical

Carbon Oxides,
Combustible

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapors possible in the event of a fire.

5.3 Special Equipment/Precautions for Firefighters

In the event of fire, wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment.

5.4 Other Information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6 - Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Do not breath vapors, aerosols. Evacuate the danger area, observe emergency procedures and consult an expert. Use proper personal protective equipment as indicated in Section 8.

6.2 Environmental Precautions

Do let product to enter drains

6.3 Methods and Materials for Containment and Cleaning Up

Cover drains. Collect, bind and pump off spills. Observe possible material restrictions (see sections 7 and 10). Clean up spills immediately, observing precautions in the Protective Equipment section. Take up or absorb material, then place into a suitable clean, dry, closed container for disposal.

6.4 Other Information

For disposal instructions see section 13.

SECTION 7 - Handling and Storage

7.1 Precautions for Safe Handling

For precautions see section 2.2

7.2 Conditions for Storage Including any Incompatibilities

Keep container tightly closed. Hygroscopic

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7.3 Other Information

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8 - Exposure Controls, Personal Protection**8.1 Control Parameters**

Ingredients with workplace control parameters.

8.2 Engineering Controls

Change contaminated clothing. Wash hands after working with substance.

8.3 Personal Protective Equipment**Eyes**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin

Wear appropriate protective gloves to prevent skin exposure. Wear impervious gloves: Nitrile rubber with layer thickness 0.11mm.

Clothing

Wear appropriate impervious protective clothing to prevent skin exposure.

Respirators

Follow the OSHA respirator regulations found in 29 CFR OSHA 1910.134, European Standard DIN EN 149, DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environment exposure

Do not let product enter drains

SECTION 9 - Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear, Viscous
Odor	: Odorless
pH	: 5.5-8
Vapor Density	: 3.18 (Air = 1.0)
Vapor Pressure	: 0.26 hPa at 100 °C (212 °F) 5.7 hPa at 150 °C (302 °F)
Viscosity	: No Data available
Melting Range	: 20 °C / 68°F
Flash Point	: 199°C / 390°F
Boiling Point	: 182°C / 360°F
Decomposition Temperature	: No Data available
Autoignition Temperature	: 370°C / 698°F
Specific Gravity/Density	: 1.261 g/mol
Solubility	: Miscible with water
Molecular Formula	: C ₃ H ₈ O ₃

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Molecular Weight : 92.09 g/mol

SECTION 10 - Stability and Reactivity**10.1 Chemical Stability**

Stable under standard ambient conditions (room temperature).

10.2 Conditions to Avoid

Incompatible products. Excess heat.

10.3 Incompatibilities with Other Materials

Strong oxidizing agents

10.4 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors. In the event of a fire refer to section 5

10.5 Hazardous Polymerization

Hazardous polymerization may occur.

SECTION 11 - Toxicological Information**11.1 Toxicological Effects**

LD50/LC50 Oral, rat : LD50 = 12,600 mg/kg
 LD50/LC50 Dermal, rabbit : LD50 => 10,000 mg/kg
 LD50/LC50 Inhalation, rat : LC50 => 570mg/m³ (1h)
 Carcinogenicity : CAS# 56-81-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA
 Epidemiology : No data available
 Teratogenicity : No data available
 Reproductive Effects : No data available
 Neurotoxicity : No data available
 Mutagenicity : No data available
 Other Studies : No data available

11.2 Additional Information

RTECS# : MA8050000

Tumorigenic effects have been reported in experimental animals. See actual RTECS for complete information.
 To the best of our knowledge the associated physical, chemical and toxicological properties of this chemical have not undergone thorough investigation, all known information is contained in this SDS.

SECTION 12 - Ecological Information**12.1 Ecotoxicity**

Toxicity to Daphnia and Other Aquatic Invertebrates	
LC50 – Oncorhynchus mykiss (Rainbow Trout)	51mg/l – 96h
LC50 - Freshwater Fish	51-57 mL/L 96H
EC50 – Daphnia Magna/Water Flea	500 mg/L > 24H

12.2 Persistence and Degradability

Biodegradability Result : Aerobic – Exposure time 2d
 Result: 90% - Readily biodegradable
 Method : ECHA

12.3 Bioaccumulative Potential

No data available

12.4 Mobility in Soil

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No data available

12.5 Results of PBT and vPvB Assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT).

12.6 Other Adverse Effects

No data available

SECTION 13 - Disposal Considerations

Waste material must be disposed of in accordance with the national and Ioc. No mixing with other waste. Handle uncleaned containers like the product. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14 - Transport Information

Regulations	US DOT	IATA	IMDG	Further information
Shipping Name	Not Dangerous Goods	Not Dangerous Goods	Not Dangerous Goods	Not classified as dangerous in the meaning of transport regulations
Hazard Class				
UN Number				
Packing Group				

SECTION 15 - Regulatory Information

15.1 EHS Chemical Specific Regulations

SARA:

- Section 302 : This material does not contain any components with a section 302 EHS TPQ
 Section 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
 SARA 311/312 Hazards : Chronic Health Hazard

STATE SPECIFIC:

State Right to Know Regulations : This product may contain substances regulated by state to know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
1,2,3-Propanetriol 56-81-5	X	X	X

SECTION 16 - Additional Information

16.1 Hazard Ratings

NFPA Rating	
Health hazard	0
Fire Hazard	1
Reactivity Hazard	0

HMIS Classification	
Health hazard	0
Flammability	1
Physical Hazards	0

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