



# SAFETY DATA SHEET

Preparation Date: 1/22/2014

Revision Date: 2/10/2016

Revision Number: G2

## 1. IDENTIFICATION

### Product identifier

**Product code:** G1015  
**Product Name:** GLYCERIN, SYNTHETIC, USP, EP, BP, JP

### Other means of identification

**Synonyms:** 1,2,3-Propanetriol  
1,2,3-Trihydroxypropane  
Glycerin mist  
Glycerin, anhydrous  
Glycerin, synthetic  
Glycerine  
Glyceritol  
Glycyl alcohol  
Grocolene  
Osmoglyn  
Synthetic glycerin  
Trihydroxypropane  
glicerina (Spanish)  
glycérine (French)  
**CAS #:** 56-81-5  
**RTECS #** MA8050000  
**CI#:** Not available

### Recommended use of the chemical and restrictions on use

**Recommended use:** Solvent. Cosmetics. Lubricant. Soaps. In Foods.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
14422 South San Pedro St.  
Gardena, CA 90248  
(310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Martin LaBenz (West Coast)  
**Contact Person:** Ibad Tirmiz (East Coast)

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation

Category 2B

**Product code:** G1015

**Product name:** GLYCERIN,  
SYNTHETIC, USP, EP, BP, JP

1 / 12

## Label elements

### **Warning**

**Hazard statements**  
Causes eye irritation

### **Hazards not otherwise classified (HNOC)**

Not Applicable

### **Other hazards**

Causes mild skin irritation

### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

### **Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Components	CAS-No.	Weight %
Glycerin 56-81-5	56-81-5	100

## **4. FIRST AID MEASURES**

### First aid measures

#### **General Advice:**

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

#### **Skin Contact:**

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.

#### **Eye Contact:**

Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

#### **Inhalation:**

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

#### **Ingestion:**

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

### Most important symptoms and effects, both acute and delayed

#### **Symptoms**

Mild eye irritation. Mild skin irritation. Central nervous system effects. Headache. Drowsiness. Nausea. Vomiting. Dehydration. Thirst.

### Indication of any immediate medical attention and special treatment needed

#### **Notes to Physician:**

Treat symptomatically

### Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

## 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

#### **Suitable Extinguishing Media:**

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray mist or foam.

#### **Unsuitable Extinguishing Media:**

No information available.

### Specific hazards arising from the chemical

#### **Hazardous Combustion Products:**

Carbon monoxide; Carbon dioxide

#### **Specific hazards:**

May be combustible at high temperatures  
May be ignited by heat, sparks or flames  
Container explosion may occur under fire conditions or when heated

### Special Protective Actions for Firefighters

#### **Specific Methods:**

No information available.

#### **Special Protective Equipment for Firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

#### **Personal Precautions:**

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all sources of ignition.

#### **Environmental precautions**

Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

#### **Methods for containment**

Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

#### **Methods for cleaning up**

Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

#### **Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

Hygroscopic. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

**Incompatible Materials:**

Oxidizing agents. Acids. Acid anhydrides. Aniline. Nitrobenzene.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****National occupational exposure limits****U.S Occupational Exposure Limits:****United States**

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Glycerin 56-81-5	15 mg/m <sup>3</sup> TWA	None	None	None

**Canada****Canada Occupational Exposure Limits:**

Components	Alberta	British Columbia	Ontario	Quebec
Glycerin 56-81-5	10 mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> TWA 3 mg/m <sup>3</sup> TWA respirable	10 mg/m <sup>3</sup> TWA mist	10 mg/m <sup>3</sup> TWAEV mist

**Australia and Mexico****Occupational Exposure Limits for Australia and Mexico:**

Components	Australia	Mexico
Glycerin 56-81-5	10 mg/m <sup>3</sup> TWA	10 mg/m <sup>3</sup> TWA

**Appropriate engineering controls****Engineering measures to reduce exposure:**

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

**Individual protection measures, such as personal protective equipment****Personal Protective Equipment**

**Eye protection:** Goggles Safety glasses with side-shields

**Skin and body protection:** Long sleeved clothing. Chemical resistant apron. Gloves.

**Respiratory protection:** Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent. .

**Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Physical state:</b> Liquid.	<b>Appearance:</b> Viscous. Syrupy.	<b>Color:</b> Clear. Colorless.
<b>Odor:</b> Mild (Slight).	<b>Taste</b> Sweet.	<b>Formula:</b> C3-H8-O3
<b>Molecular/Formula weight:</b> 92.09	<b>Flammability:</b> No information available	<b>Flash point (°C):</b> 160
<b>Flashpoint (°C/°F):</b> 177°C/350.6 °F 160 °C/320 °F	<b>Flash Point Tested according to:</b> Open cup Closed cup	<b>Autoignition Temperature (°C/°F):</b> 370-392 °C/698-739 °F
<b>Lower Explosion Limit (%):</b> No information available	<b>Upper Explosion Limit (%):</b> No information available	<b>pH:</b> No information available
<b>Melting point/range(°C/°F):</b> 19-20 °C/66.2-68 °F	<b>Boiling point/range(°C/°F):</b> 290 °C/554 °F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available	<b>Specific gravity:</b> 1.2613-1.2636 @ 20 °C
<b>Vapor pressure @ 20°C (kPa):</b> 0	<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> 3.17
<b>VOC content (g/L):</b> No information available	<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> -1.76
<b>Viscosity:</b> No information available	<b>Miscibility:</b> No information available	<b>Solubility:</b> Freely soluble in water Insoluble in Benzene Insoluble in Chloroform Insoluble in Carbon disulfide Insoluble in Carbon tetrachloride Insoluble in Petroleum ether

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with oxidizing agents

Reactive with acids

It can react vigorously, violently or explosively with oxidizers

Glycerin is incompatible with strong oxidizers such as chromium trioxide, potassium chlorate, or potassium permanganate and may explode on contact

Explosive glyceryl nitrate is formed from a mixture of glycerin and nitric and sulfuric acids

When Perchloric acid and Lead oxide are mixed with glycerin, perchloric esters are formed, which may be explosive

Glycerin and chlorine may explode if heated and confined

Glycerin may react violently with acetic anhydride, aniline, nitrobenzene, chromic oxide, lead oxide, fluorine, phosphorous triiodide, ethylene oxide, silver perchlorate, sodium peroxide, and sodium hydride

### Chemical stability

#### Stability:

Stable under recommended storage conditions

#### Possibility of Hazardous Reactions:

Hazardous polymerization does not occur

#### Conditions to avoid:

Heat. Ignition sources. Exposure to moist air. Exposure to moisture.

#### Incompatible Materials:

Oxidizing agents. Acids. Acid anhydrides. Aniline. Nitrobenzene.

#### Hazardous decomposition products:

Carbon monoxide. Carbon dioxide.

**Other Information****Corrosivity:**

No information available

**Special Remarks on Corrosivity:** No information available**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Principal Routes of Exposure:**

Skin. Ingestion. Eyes.

**Acute Toxicity****Component Information***Glycerin - 56-81-5***LD50/oral/rat** = 12600 mg/kg Oral LD50 Rat**LD50/oral/mouse** = 4090 mg/kg**LD50/dermal/rat** = > 21900 mg/kg Dermal LD50 Rat**LD50/dermal/rabbit** = 10 g/kg Dermal LD50 Rabbit**LC50/inhalation/rat** = >570 mg/m<sup>3</sup> Inhalation LC50 Rat 1 h**LC50/inhalation/mouse** = No information available**Other LD50 or LC50 information** = 27 gm/kg LD50 oral Rabbit**Product Information****LD50/oral/rat** =**VALUE- Acute Tox Oral** = 12600mg/kg**LD50/oral/mouse** =**Value - Acute Tox Oral** = 4090mg/kg**LD50/dermal/rabbit****VALUE-Acute Tox Dermal** = >10000mg/kg**LD50/dermal/rat****VALUE -Acute Tox Dermal** = > 21900mg/kg**LC50/inhalation/rat****VALUE-Vapor** = > 570mg/m<sup>3</sup> (1-hr)**VALUE-Gas** = No information available**VALUE-Dust/Mist** = No information available**LC50/Inhalation/mouse****VALUE-Vapor** = No information available**VALUE - Gas** = No information available**VALUE - Dust/Mist** = No information available**Symptoms****Skin Contact:**May cause skin irritation. Mild skin irritation. It may be absorbed through the skin.  
Prolonged skin contact is unlikely to result in absorption of harmful amounts.

<b>Eye Contact:</b>	Contact with eyes may cause irritation. Mild eye irritation. Symptoms may include stinging, tearing, redness.
<b>Inhalation</b>	May cause irritation of respiratory tract. This material has a very low vapor pressure. Not expected to be an inhalation hazard for normal handling. If the product is misted or heated, the Inhalation of mist or vapor can cause respiratory tract irritation.
<b>Ingestion</b>	Low hazard. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause dehydration. May cause thirst. May cause hyperglycemia. May affect liver . It may affect behavior/central nervous system (excitement, depression, general anesthetic, headache, dizziness, convulsions, confusion, insomnia, muscle weakness). It may affect behavior/central nervous system (drowsiness). May affect blood (changes in serum composition).
<b>Aspiration hazard</b>	No information available
<b><u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u></b>	
<b>Chronic Toxicity</b>	<p>Prolonged or repeated ingestion may affect the blood (changes in white blood cell count)</p> <p>Prolonged or repeated ingestion may affect the blood (changes in serum composition)</p> <p>Chronic ingestion of Glycerin may increase blood serum glyceride concentration</p> <p>Prolonged or repeated ingestion may affect the kidneys</p> <p>Prolonged or repeated ingestion may affect the liver</p>
<b>Sensitization:</b>	No information available
<b>Mutagenic Effects:</b>	<p>May affect genetic material</p> <p>Experiments with human lymphocytes have shown mutagenic effects</p>
<b>Carcinogenic effects:</b>	Not considered carcinogenic

Components	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Glycerin	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

<b><u>Reproductive toxicity</u></b>	No data is available
<b>Reproductive Effects:</b>	No information available
<b>Developmental Effects:</b>	No information available
<b>Teratogenic Effects:</b>	No information available

#### **Specific Target Organ Toxicity**

<b>STOT - single exposure</b>	No information available
<b>STOT - repeated exposure</b>	No information available
<b>Target Organs:</b>	No information available

## **12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** Aquatic environment.

*Glycerin - 56-81-5*

**Freshwater Fish Species Data:** 51 - 57 mL/L LC50 Oncorhynchus mykiss 96 h static 1

**Water Flea Data:** 500 mg/L EC50 Daphnia magna 24 h

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available

**Mobility:** No information available

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

#### Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

#### Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Glycerin	None	None	None	None

## 14. TRANSPORT INFORMATION

### DOT

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** None  
**ERG No:** No information available  
**Marine Pollutant:** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions:** No Information available  
**Symbol(s):** No information available

### TDG (Canada)

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Description:** No information available

### ADR

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available

**Product code:** G1015

**Product name:** GLYCERIN,  
SYNTHETIC, USP, EP, BP, JP

8 / 12



## 14. TRANSPORT INFORMATION

**Packing Group:** No information available  
**Subsidiary Risk:** No information available  
**Classification Code:** No information available  
**Description:** No information available  
**CEFIC Tremcard No:** No information available

### IMO / IMDG

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Description:** No information available  
**IMDG Page:** No information available  
**Marine Pollutant** No information available  
**MFAG:** No information available  
**Maximum Quantity:** No information available

### RID

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Classification Code:** No information available  
**Description:** No information available

### ICAO

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Description:** No information available

### IATA

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**ERG Code:** No information available  
**Special Provisions** No information available  
**Description:** No information available

## 15. REGULATORY INFORMATION

### International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Glycerin	Present	Present KE-29297	Present	Present (2)-242	Present	Present	Present 200-289-5

### U.S. Regulations

**Product code:** G1015

**Product name:** GLYCERIN,  
SYNTHETIC, USP, EP, BP, JP

#### Glycerin

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 3319

Pennsylvania RTK: Present

Minnesota - Hazardous Substance List: Present

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 182.90 21 CFR 182.1320

FDA - Direct Food Additives 21 CFR 172.866

FDA - 21 CFR - Total Food Additives 169.175 172.811 175.300 175.320 176.210 177.1390 177.2420 177.2800 178.3500  
182.1320 182.90  
172.866 178.3500

#### California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

##### Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

##### Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Glycerin	Not Listed	Not Listed	Not Listed	Not Listed

#### CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Glycerin	None	None	None	None	None

#### U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Glycerin	Not Applicable	Not Applicable

#### Canada

##### WHMIS hazard class:

Non-controlled

##### Glycerin

Uncontrolled product according to WHMIS classification criteria

##### Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

#### Inventory

Components	Canada (DSL)	Canada (NDSL)
Glycerin	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Glycerin	Not listed	Not listed

**EU Classification****R-phrase(s)**

not determined (not applicable)

**S -phrase(s)**

none

Components	Classification	Concentration Limits:	Safety Phrases
Glycerin		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

Not dangerous

**16. OTHER INFORMATION**

## 16. OTHER INFORMATION

**Preparation Date:** 1/22/2014  
**Revision Date:** 2/10/2016  
**Prepared by:** Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**