



# MATERIAL SAFETY DATA SHEET

## 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** USP Excipient Glycerin

**Manufacturer Name:**  
Industrial Oils & Lubricants  
12201 Torrence Avenue  
Chicago, Illinois 60617  
IOLCustomerService@cargill.com

**Emergency Telephone:**  
1-800-424-9300

**Non-emergency Telephone:**  
1-800-842-3631

**Intended Use:** Industrial use

## 2 HAZARDS IDENTIFICATION

### Emergency Overview

**Physical State:** Liquid

**Color:** Clear

**Odor:** Odorless

**CAUTION!**

High mist concentrations may cause irritation of respiratory tract.

### Potential Health Effects

**Inhalation:** May cause respiratory tract irritation.

**Eye Contact:** May cause temporary eye irritation.

**Skin Contact:** Prolonged or repeated contact may dry skin and cause irritation.

**Ingestion:** No harmful effects expected in amounts likely to be ingested by accident.

**OSHA Regulatory Status:** This product is hazardous according to OSHA 29CFR 1910.1200.

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration*
†Glycerin	56-81-5	> 99.7%

\* All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

† This chemical is hazardous according to OSHA criteria.

#### 4 FIRST AID MEASURES

**Inhalation:** If symptomatic, move to fresh air. Get medical attention if symptoms persist.

**Eye Contact:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention promptly if symptoms occur after washing.

**Skin Contact:** Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

**Ingestion:** First aid is normally not required. However, if greater than 1/2 liter (pint) ingested, seek medical attention.

#### 5 FIRE-FIGHTING MEASURES

**Extinguishing Media:** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**Unsuitable Extinguishing Media:** None.

**Special Fire Fighting Procedures:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Unusual Fire & Explosion Hazards:** None known.

**Hazardous Combustion Products:** Carbon Oxides

#### 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear appropriate personal protective equipment.

**Spill Cleanup Methods:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Flush area with water. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

**Environmental Precautions:** Avoid discharge into drains, water courses or onto the ground.

#### 7 HANDLING AND STORAGE

**Handling:** No special precautions are necessary beyond normal good hygiene practices. See Section 8 of the MSDS for additional personal protection advice when handling this product.

**Storage:** Store away from incompatible materials.

#### 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

##### Exposure Limits:

Chemical Name	Source	Type	Exposure Limits	Notes
Glycerin (Mist.)	CA. Alberta OELs	TWA	10 mg/m <sup>3</sup>	
Glycerin (Mist.)	CA. British Columbia OELs	TWA	10 mg/m <sup>3</sup>	

Glycerin (Respirable mist)	CA. British Columbia OELs	TWA	3 mg/m <sup>3</sup>	
Glycerin (Mist.)	CA. Ontario OELs	TWA	10 mg/m <sup>3</sup>	
Glycerin (Mist.)	MEX. OELs	TWA	10 mg/m <sup>3</sup>	
Glycerin (Mist.)	US. ACGIH TLV	TWA	10 mg/m <sup>3</sup>	
Glycerin (Respirable fraction.)	US. OSHA Z-1 PEL	TWA	5 mg/m <sup>3</sup>	

**Engineering Controls:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Eye Protection:** Risk of contact: Wear approved safety goggles.

**Hand Protection:** It is a good industrial hygiene practice to minimize skin contact.

**Skin Protection:** Apron and long sleeves are recommended.

**Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental Exposure Controls:** Environmental manager must be informed of all major spillages.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

**Color:** Clear

**Odor:** Odorless

**Odor Threshold:** No data available.

**Physical State:** Liquid

**pH:** 7 (Approximate)

**Melting Point:** 18°C (64°F)

**Freezing Point:** No data available.

**Boiling Point:** 290°C (554°F)

**Flash Point:** 199°C (390°F) (Closed Cup)

**Evaporation Rate:** No data available.

**Flammability (Solid):** No data available.

**Flammability Limit - Upper (%):** No data available.

**Flammability Limit - Lower (%):** No data available.

**Vapor Pressure:** 0.0025 mmHg @50°C

**Vapor Density (Air=1):** 3.17

**Specific Gravity:** 1.26 (20°C)

**Solubility in Water:** Miscible with water.

**Solubility (Other):** No data available.  
**Partition Coefficient (n-Octanol/water):** No data available.  
**Autoignition Temperature:** 370°C (698°F)  
**Decomposition Temperature:** No data available.  
**Viscosity:** No data available.  
**Percent Volatile:** 0 %vol  
**Explosive Properties:** No data available

<b>10</b>	<b>STABILITY AND REACTIVITY</b>
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**Stability:** Stable.

**Conditions to Avoid:** None known.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** No data available.

**Possibility of Hazardous Reactions:** Will not occur.

<b>11</b>	<b>TOXICOLOGICAL INFORMATION</b>
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**Specified Substance(s)**

**Acute Toxicity:**

Chemical Name	Test Results
Glycerin	Oral LD50 (Rat): 12600 mg/kg

**Listed Carcinogens:** None.

**Product Information**

**Acute Toxicity:**

**Test Results:** No test data available for the product.

**Other Acute:** High mist concentrations may cause irritation of respiratory tract. No additional adverse health effects noted.

**Chronic Toxicity:** No additional adverse health effects noted.

<b>12</b>	<b>ECOLOGICAL INFORMATION</b>
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**Ecotoxicity:** Not expected to be harmful to aquatic organisms.

**Specified Substance(s)**

Chemical Name	Test
Glycerin	LC50 (24 hour(s), Goldfish): 5000 mg/l

**Mobility:** No data available.

**Persistence and Degradability:** No data available.

**Other Adverse Effects:** No data available.

<b>13</b>	<b>DISPOSAL CONSIDERATIONS</b>
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**General Information:** Do not discharge into drains, water courses or onto the ground. Discharge, treatment, or disposal may be subject to national, state, or local laws. Empty containers may contain product residues.

**Disposal Methods:** No specific disposal method required.

**Container:** Since emptied containers retain product residue, follow label warnings even after container is emptied.

<b>14</b>	<b>TRANSPORT INFORMATION</b>
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**DOT** Not regulated.

**TDG** Not regulated.

**IATA** Not regulated.

**IMDG** Not regulated.

<b>15</b>	<b>REGULATORY INFORMATION</b>
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**Canadian Controlled Products Regulations:** This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

**WHMIS Classification:** This is not a WHMIS controlled product.

**Mexican Dangerous Statement:** This product is not dangerous according to Mexican regulations.

**Inventory Status**

**This product or all components are listed or exempt from listing on the following inventory:** DSL, TSCA

**US Regulations**

**CERCLA Hazardous Substance List (40 CFR 302.4):** Not regulated.

**SARA Title III**

**Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A):** Not regulated.

**Section 311/312 (40 CFR 370):**

Acute (Immediate)     Chronic (Delayed)     Fire     Reactive     Pressure Generating

**Section 313 Toxic Release Inventory (40 CFR 372):** Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**  
Not regulated.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):** Not regulated.

**Drug Enforcement Act:** Not regulated.

### **TSCA**

**TSCA Section 4(a) Final Test Rules & Testing Consent Orders:** Not regulated.

**TSCA Section 5(a)(2) Final Significant New Use Rules (SNURs) (40CFR 721, Subpt. E):** Not regulated.

**TSCA Section 5(e) PMN-Substance Consent Orders:** Not regulated.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):** Not regulated.

### **State Regulations**

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** Not regulated.

**Massachusetts Right-To-Know List:** Glycerin

**Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act. 451 of 1994)):** Not regulated.

**Minnesota Hazardous Substances List:** Glycerin

**New Jersey Right-To-Know List:** Not regulated.

**Pennsylvania Right-To-Know List:** Glycerin

**Rhode Island Right-To-Know List:** Glycerin

<b>16</b>	<b>OTHER INFORMATION</b>
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### **HAZARD RATINGS**

	<b>Health Hazard</b>	<b>Fire Hazard</b>	<b>Instability</b>	<b>Special Hazard</b>
<b>NFPA</b>	1	1	0	NONE

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

NFPA Label colored diamond code: Blue - Health; Red - Flammability; Yellow - Instability; White - Special Hazards

	<b>Health Hazard</b>	<b>Flammability</b>	<b>Physical Hazard</b>	<b>Personal Protection</b>
<b>HMIS</b>	1	1	0	--

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

HMIS Label colored bar code: Blue - Health; Red - Flammability; Orange - Physical Hazards; White - Special

**Issue Date:** 03-Dec-2009

**Supersedes Date:** New

**SDS No.:** 1027481

**Disclaimer:** To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.