

# SILVER FERN CHEMICAL



## Safety Data Sheet

### Diethylene Glycol Methyl Ether (Glycol Ether DM)

#### SECTION 1: IDENTIFICATION

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**Product Name:** Glycol Ether DM

**CAS Number:** 111-77-3

**Chemical Name:** Diethylene Glycol Methyl Ether

**Synonyms:** 2-(2-Methoxyethoxy)ethanol; Methyl diglycol

**Uses:** Laboratory chemicals, Manufacture of substances

**Company**

Silver Fern Chemical, Inc.  
2226 Queen Anne Avenue North  
Suite #C  
Seattle WA 98109, USA

**Business Contact**

Customer Service: 1-866-282-3384  
[info@silverfernchemical.com](mailto:info@silverfernchemical.com)

**24 Hour Emergency Contact**

Infotrac 800-535-5053  
Outside USA & Canada 352-323-3500

#### SECTION 2: HAZARD IDENTIFICATION

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##### Warning



**Classification of the substance or mixture:**

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

Flammable liquids (Category 4), H227  
Reproductive toxicity (Category 2), H361

**Hazard statement(s):**

H227 Combustible liquid.  
H361 Suspected of damaging fertility or the unborn child.

**Precautionary statement(s):**

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

CAS #	Content (W/W)	Ingredients
111-77-3	<=100%	Diethylene Glycol Methyl Ether

Formula :  $C_5H_{12}O_3$

Molecular weight : 120.15 g/mol

**SECTION 4: FIRST AID MEASURES**

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact :** Wash off with soap and plenty of water. Consult a physician

**In case of eye contact :** Flush eyes with water as a precaution.

**If swallowed :** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labelling

**Indication of any immediate medical attention and special treatment needed:** no data available

**SECTION 5: FIRE FIGHTING MEASURES**

**Flash Point:** 87 °C (189 °F) - closed cup

**Lower/Upper explosion limit:** Upper explosion limit: 22.7 %(V)/ Lower explosion limit: 1.38 %(V)

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**Special hazards arising from the substance or mixture:** Carbon oxides

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary

**Further information :** Use water spray to cool unopened containers

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**Containment and clean up procedures:** Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal

**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 7: HANDLING AND STORAGE

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**Handling:** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge

**Storage:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store under inert gas. hygroscopic

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

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**Components with workplace control parameters:** Contains no substances with occupational exposure limit values.

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal Protective Equipment (PPE)

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection:** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Body protection:** impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**General safety and hygiene measures:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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Appearance	Form: clear, liquid Color: light yellow
Odor	no data available

Odor Threshold	no data available
pH	no data available
Melting point/freezing Point	Melting point/range: -70 °C (-94 °F) - lit.
Initial boiling point and boiling range	194 °C (381 °F) - lit.
Flash point	87 °C (189 °F) - closed cup
Evaporation rate	no data available
Flammability (solid, gas)	no data available
Upper/lower flammability or explosive limits	Upper explosion limit: 22.7 %(V)/ Lower explosion limit: 1.38 %(V)
Vapor pressure	0.3 hPa (0.2 mmHg) at 20 °C (68 °F)
Vapor density	4.15 - (Air = 1.0)
Relative density	1.023 g/cm <sup>3</sup> at 25 °C (77 °F)
Water solubility	completely miscible
Partition Coefficient: n-octanol/water	log Pow: -0.47 at 20 °C (68 °F)
Auto-ignition temperature	no data available
Decomposition temperature:	no data available
Viscosity:	no data available
Explosive properties:	no data available
Relative vapour density	4.15 - (Air = 1.0)

## SECTION 10: STABILITY AND REACTIVITY

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**Conditions to avoid:** Heat, flames and sparks

**Substances to avoid:** Strong oxidizing agents

**Hazardous reactions:** no data available

**Decomposition products:** no data available

**Chemical stability:** Stable under recommended storage conditions

## SECTION 11: TOXICOLOGICAL INFORMATION

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**Acute toxicity :** LD50 Oral - Rat - > 7,000 mg/kg  
 Inhalation: No data available  
 LD50 Dermal - Rabbit - > 20,400 mg/kg  
 LD50 Dermal - Rabbit - 9,404 mg/kg

**Skin corrosion/irritation :** Skin - Rabbit/ Result: No skin irritation - 72 h

**Serious eye damage/eye irritation :** Skin - Rabbit/ Result: No skin irritation - 72 h

**Respiratory or skin sensitization** ; Maximisation Test (GPMT) - Guinea pig/ Result: Does not cause skin sensitisation.

**Germ cell mutagenicity:** no data available

**Carcinogenicity:**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity** : Possible risk of congenital malformation in the fetus. Suspected human reproductive toxicant Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

**Specific target organ toxicity - single exposure:** no data available

**Specific target organ toxicity - repeated exposure:** no data available

**Aspiration hazard:** no data available

**Additional Information:**

RTECS: KL6125000

Stomach - Irregularities - Based on Human Evidence

## SECTION 12: ECOLOGICAL INFORMATION

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**Ecotoxicity :**

Toxicity to fish      LC50 - Lepomis macrochirus - 7,500 mg/l - 96 h  
                                 LC50 - Pimephales promelas (fathead minnow) - 5,741 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates      EC50 - Daphnia magna (Water flea) - 1,192 mg/l - 48 h

Toxicity to algae      EC50 - Selenastrum capricornutum (green algae) - > 1,000 mg/l - 96 h

**Biodegradability:**

Result: 100 % - Readily biodegradable

**Bioaccumulative**

**Potential:** no data available

**Other:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## SECTION 13: DISPOSAL CONSIDERATIONS

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**Waste disposal of substance:** This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Container disposal:** Dispose of as unused product.

## SECTION 14: TRANSPORT INFORMATION

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### DOT (US)

NA-Number: 1993                      Class: NONE                      Packing group: III  
Proper shipping name: Combustible liquid, n.o.s. (2-(2-Methoxyethoxy)ethanol)  
Poison Inhalation Hazard: No  
Reportable Quantity (RQ): no

### IMDG

Not dangerous good

### IATA

Not dangerous good

*This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.*

## SECTION 15: REGULATORY INFORMATION

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### SARA 302 Component

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313

2-(2-Methoxyethoxy)ethanol              CAS-No 111-77-3              Revision Date 1993-04-24

### SARA 311/312 Hazards

Fire Hazard, Chronic Health Hazard

### Massachusetts Right To Know Components

2-(2-Methoxyethoxy)ethanol              CAS-No 111-77-3              Revision Date 1993-04-24

### Pennsylvania Right To Know Components

2-(2-Methoxyethoxy)ethanol              CAS-No 111-77-3              Revision Date 1993-04-24

### New Jersey Right To Know Components

2-(2-Methoxyethoxy)ethanol              CAS-No 111-77-3              Revision Date 1993-04-24

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## SECTION 16: OTHER INFORMATION

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### HMIS Rating

Health hazard:              0  
Chronic Health Hazard:    \*  
Flammability:                2  
Physical Hazard              0

### NFPA Rating

Health hazard:              0  
Fire Hazard:                 2  
Reactivity Hazard:         0

## DISCLAIMER OF RESPONSIBILITY

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Revision Date 01/28/2015