

SAFETY DATA SHEET

Preparation Date: 4/16/2018

Revision Date: 4/16/2018

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: D1110
Product Name: DIPROPYLENE GLYCOL METHYL ETHER

Other means of identification

Synonyms: 1,4-Dimethyl-3,6-dioxa-1-heptanol
 1-(1-Methyl-2-methoxyethoxy)-2-propanol
 1-(2-Methoxyisopropoxy)-2-propanol
 Methyl dipropanol
 Oxybispropanol methyl ether

CAS #: 34590-94-8
RTECS # JM1575000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
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 according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

| | |
|--|------------|
| Specific target organ toxicity (single exposure) | Category 3 |
| Flammable liquids | Category 4 |

Label elements

Warning

Hazard statements

May cause respiratory irritation
 Combustible liquid

**Hazards not otherwise classified (HNOC)**

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear protective gloves
Wear eye/face protection
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep cool

Precautionary Statements - Response

In case of fire: Use CO₂, dry chemical, or foam to extinguish.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Weight % |
|---------------------------------|------------|----------|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | 100 |

4. FIRST AID MEASURES**First aid measures**

General Advice: National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

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

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention if irritation occurs.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain 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

Product code: D1110

Product name: DIPROPYLENE
GLYCOL METHYL ETHER

2 / 12

Symptoms
May cause eye/skin irritation
Irritating to respiratory system
May cause headache
Lightheadedness
Dizziness
Fainting

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: Dry chemical. Carbon dioxide (CO₂). Water spray mist or foam.

Unsuitable Extinguishing Media: High volume water jet. Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon Monoxide, Carbon Dioxide.

Specific hazards: Combustible material. May be ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Container explosion may occur under fire conditions or when heated.

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

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: Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

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). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. 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. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice

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

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

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

Incompatible Materials:

Oxidizing agents
Strong acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

| Components | CAS-No. | OSHA | NIOSH | ACGIH | AIHA WEEL |
|------------------------------------|------------|--|--|-----------------------------|-----------|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | 100 ppm TWA 600 mg/m ³ TWA | 100 ppm TWA 600 mg/m ³ TWA 150 ppm STEL 900 mg/m ³ STEL | 150 ppm STEL 100 ppm TWA | None |

Canada

| Components | CAS-No. | Canada - Alberta | Canada - British Columbia | Canada - Ontario | Canada - Quebec |
|---------------------------------|------------|--|-----------------------------|------------------|-----------------|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | 100 ppm TWA 606 mg/m ³ TWA 150 ppm STEL 909 mg/m ³ STEL | 100 ppm TWA 150 ppm STEL | 150 ppm STEL | None |

Australia and Mexico

| Components | CAS-No. | Australia | Mexico |
|---------------------------------|------------|---|---|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | 50 ppm TWA 308 mg/m ³ TWA | 100 ppm TWA 60 mg/m ³ TWA 150 ppm STEL 900 mg/m ³ STEL |

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
- Skin and body protection:** Long sleeved clothing
Chemical resistant apron
Gloves
- Respiratory protection:** Vapor respirator. 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

| | | |
|---|---|--|
| Physical state: Liquid | Appearance: No information available. | Color: Colorless. |
| Odor: Ether-like. | Taste: Bitter. | Formula: C7H16O3 |
| Molecular/Formula weight: 148.20 | Flammability: Combustible | Flashpoint (°C/°F): 85°C/185°F |
| Flash Point Tested according to: Closed cup | Autoignition Temperature (°C/°F): No information available | Lower Explosion Limit (%): 1.1% |
| Upper Explosion Limit (%): 3% | Melting point/range(°C/°F): Freezing point = -80 °C/-112 °F | Decomposition temperature(°C/°F): No information available |
| Boiling point/range(°C/°F): 190 °C/374 °F | Bulk density: No information available | Density (g/cm³): No information available |

Specific gravity:
0.95

pH:
No information available

Vapor pressure @ 20°C (kPa):
No information available

Evaporation rate:
No information available

Vapor density:
5.11

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

**Partition coefficient
(n-octanol/water):**
0.803

Viscosity:
No information available

Miscibility:
Miscible with water
Miscible with Ethanol
Miscible with Ether
Miscible with Acetone
Miscible with Methanol
Miscible with Carbon tetrachloride
Miscible with Benzene

Solubility:
Soluble in Water
Soluble in Ether
Soluble in Acetone

10. STABILITY AND REACTIVITY

Reactivity
No information available

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Stable at normal conditions.

Incompatible Materials: Oxidizing agents
Strong acids

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:
Eyes. Inhalation. Ingestion.

Acute Toxicity

Component Information

| | |
|---------------------------------|------------|
| Dipropylene Glycol Methyl Ether | |
| CAS-No. | 34590-94-8 |

LD50/oral/rat = 5.35 g/kg Oral LD50 Rat (LOLI); 5.4-5.5 ml/kg (RTECS)
LD50/oral/mouse = No information available
LD50/dermal/rabbit = 9500 mg/kg Dermal LD50Rabbit
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 5350 mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = 9500 mg/kg

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
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.
Eye Contact: May cause eye irritation. May cause minor, transient eye irritation.
Inhalation Irritating to respiratory system. May affect behavior/central nervous system (dizziness, lightheadedness, passing out). May cause headache.
Ingestion Health injuries are not known or expected under normal use.
Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Chronic exposure may affect the liver.
Sensitization: No information available.
Mutagenic Effects: No information available
Carcinogenic effects: Not considered carcinogenic.

| Components | CAS-No. | IARC | ACGIH - Carcinogens | NTP | OSHA HCS - Carcinogens | Australia - Notifiable Carcinogenic | Australia - Prohibited Carcinogenic |
|------------|---------|------|---------------------|-----|------------------------|-------------------------------------|-------------------------------------|
| | | | | | | | |

| | | | | | | | |
|---------------------------------|------------|------------|------------|------------|------------|-------------------|-------------------|
| | | | | | | Substances | Substances |
| Dipropylene Glycol Methyl Ether | 34590-94-8 | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure Respiratory Tract.

STOT - repeated exposure No information available.

Target Organs: Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Dipropylene Glycol Methyl Ether - 34590-94-8

Freshwater Fish Species Data: 10000 mg/L LC50 Pimephales promelas 96 h static 1

Water Flea Data: 1919 mg/L LC50 Daphnia magna 48 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 | CAS-No. | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|---------------------------------|------------|------------------------|------------------------|------------------------|------------------------|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | None | None | None | None |

14. TRANSPORT INFORMATION

DOT

Product code: D1110

Product name: DIPROPYLENE
GLYCOL METHYL ETHER

8 / 12

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Class: No information available
Packing group: No information available
Emergency Response Guide Number: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): No information available
Description: 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
Marine Pollutant: No Information available
Description: No information available

ADR

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

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

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

15. REGULATORY INFORMATION

International Inventories

| Components | CAS-No. | U.S. TSCA | KOREA KECL | Philippines (PICCS) | Japan ENCS | CHINA | Australia (AICS) | EINECS-No. |
|--|------------|---------------|---------------------|---------------------|---------------------------|---------|------------------|----------------------|
| <i>Dipropylene Glycol Methyl Ether</i> | 34590-94-8 | PresentACTIVE | Present KE-12230 | Present | Present (2)-426,(7)-97 | Present | Present | Present 252-104-2 |

U.S. Regulations

Dipropylene Glycol Methyl Ether

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 0804

Pennsylvania RTK: Present

Minnesota - Hazardous Substance List: Present

California Directors List of Hazardous Substances: Present

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 | CAS-No. | Carcinogen | Developmental Toxicity | Male Reproductive Toxicity | Female Reproductive Toxicity: |
|---------------------------------|------------|------------|------------------------|----------------------------|-------------------------------|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | Not Listed | Not Listed | Not Listed | Not Listed |

CERCLA/SARA

| Components | CAS-No. | 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 de minimis |
|--|------------|---|---|--|---------------------------------|------------------------------------|
| <i>Dipropylene Glycol Methyl Ether</i> | 34590-94-8 | None | None | None | None | None |

U.S. TSCA

| Components | CAS-No. | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|---------------------------------|------------|---|--|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | Not Applicable | Not Applicable |

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
Dipropylene Glycol Methyl Ether
34590-94-8 (100)

WHMIS 2015 Hazard Classification
Flammable liquids - Category 4: H227 Combustible liquid.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

B3 Combustible liquid

Components

Dipropylene Glycol Methyl Ether

WHMIS 1988

B3

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.

| Components | WHMIS Ingredient Disclosure List - |
|---------------------------------|------------------------------------|
| Dipropylene Glycol Methyl Ether | 1 % |

Inventory

| Components | CAS-No. | Canada (DSL) | Canada (NDSL) |
|---------------------------------|------------|--------------|---------------|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | Present | Not Listed |

| Components | CAS-No. | CEPA Schedule I - Toxic Substances |
|---------------------------------|------------|---|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | Not listed |
| Components | CAS-No. | CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting |
| Dipropylene Glycol Methyl Ether | 34590-94-8 | Not listed |

EU Classification**EU GHS - SV - CLP 1272/2008**

| Components | CAS-No. | EU GHS - SV - CLP (1272/2008) |
|---------------------------------|------------|-------------------------------|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | No information |

EU - CLP (1272/2008)**R-phrase(s)**

not determined (not applicable)

S -phrase(s)

none

| Components | CAS-No. | Classification | Concentration Limits: | Safety Phrases |
|---------------------------------|------------|----------------|-----------------------|----------------|
| Dipropylene Glycol Methyl Ether | 34590-94-8 | | No information | |

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

Indication of danger:

not determined

16. OTHER INFORMATION

Preparation Date: 4/16/2018
Revision Date: 4/16/2018
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

Product code: D1110

Product name: DIPROPYLENE
GLYCOL METHYL ETHER

11 / 12

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