

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: Diethylene Glycol Monomethyl Ether (stabilized with BHT)

Product code: M0537

Product use:For laboratory research purposes.Restrictions on use:Not for drug or household use.

Company: TCI America

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Chemical Emergencies:

TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International)

Responsible department: TCI America

Environmental Health Safety and Security

+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Toxic to Reproduction [Category 1B]

WHMIS 2015: Specific Target Organ Toxicity (Single Exposure) [Category 3]

Signal word: Danger!

Hazard Statement(s): May damage fertility or the unborn child

May cause drowsiness or dizziness.

Pictogram(s) or Symbol(s):





Precautionary Statement(s):

[Response]

[Storage]

[Prevention] Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood. Avoid breathing mist, vapors or spray. Use only outdoors or in a well-ventilated area. Wear

protective gloves, protective clothing, face protection.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or

doctor if you feel unwell. If exposed or concerned: Get medical advice or attention.

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

[Disposal] Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

[HNOC]

May be harmful if in contact with skin. May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: Diethylene Glycol Monomethyl Ether (stabilized with BHT)

 $\begin{array}{lll} \mbox{Percent:} & > 99.0\% (GC) \\ \mbox{CAS RN:} & 111-77-3 \\ \mbox{Molecular Weight:} & 120.15 \\ \mbox{Chemical Formula:} & C_5 H_{12} O_3 \\ \end{array}$

Synonyms: 2-(2-Methoxy)ethanol (stabilized with BHT), Methyl Carbitol (stabilized with BHT),

mPEG2-Alcohol (stabilized with BHT)

Stabilizers: Butylated hydroxytoluene

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

advice/attention.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

Get medical advice/attention.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get

medical advice/attention.

Ingestion: Get medical advice/attention.Rinse mouth.

Symptoms/effects:

Acute: Dizziness. Drowsiness.

Delayed: No data available

Indication of any immediate medical attention:

Not available.

Notes to physician:
No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, water in large amounts, carbon dioxide.

Hazardous combustion products:

These products include: Carbon oxides

Other specific hazards:

Closed containers may explode from heat of a fire.

Advice for firefighters: Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off,

etc

Environmental precautions:

Methods and materials for containment

and cleaning up:

Prevent product from entering drains.

Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly

disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent

generation of vapour or mist. Wash hands and face thoroughly after handling.

Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.

Avoid all contact!

Confirm in advance if peroxides exist when operations involving heating such as distillation are carried

out.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool, dark and well-ventilated place.

Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents.

Hygroscopic

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C):LiquidForm:ClearColour:ColorlessOdour:Ether-likeOdor threshold:No data availableOdour threshold:No data available

Melting point/freezing point:-70°C (-94°F)pH:No data availableBoiling point/range:193°C (379°F)Vapour pressure:No data available

Decomposition temperature: No data available Vapour density: 4.1

Relative density: 1.02

Kinematic viscosity: No data available

Log Pow: No data available Evaporation rate(Butyl No data available

Acetate=1):

Dynamic Viscosity:

Flash point: 105°C (221°F) Autoignition temperature: 221°C (430°F)

Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: 1.4% Upper: 22.7%

No data available

Solubility(ies):

[Water] Miscible [Other solvents]

Miscible: Ether, Alcohols, Acetone, Dimethylformamide(DMF), Glycerol

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: May form explosive peroxides.

Possibility of hazardous reactions: No special reactivity has been reported.

Conditions to avoid: Air

Incompatible materials:

Oxidizing agents, Acids, Hypochlorites

Carbon dioxide, Carbon monoxide

11. TOXICOLOGICAL INFORMATION

RTECS Number: KL6125000

Acute Toxicity:

ihl-rat LC:>2 g/m³/1H ipr-mus LD50:2611 mg/kg orl-rat LD50:4 mL/kg skn-rbt LD50:2500 uL/kg

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

eye-rbt 500 mg/24H MLD eye-rbt 500 mg MOD

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity: No data available

o data avallable

IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

orl-mus TDLo:32 g/kg (7-14D preg) skn-rbt TDLo:3250 mg/kg (6-18D preg) orl-rat TDLo:6600 mg/kg (7-17D preg)

Target organ(s):

May cause drowsiness or dizziness.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

No data available Fish: Crustacea: No data available Algae: No data available

Persistence / degradability: No data available

Bioaccumulative potential(BCF):

Mobility in soil

Log Pow: -1.14 Soil adsorption (Koc): Henry's Law (PaM 3/mol): 1.7 x 10⁻⁶

13. DISPOSAL CONSIDERATIONS

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and

Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not

be allowed to enter the environment, drains, water ways, or the soil.

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

Non-hazardous for transportation. DOT (US)

Non-hazardous for transportation. <u>IATA</u>

IMDG Non-hazardous for transportation.

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313: Not Listed **SARA 302:** Not Listed

State Regulations State Right-to-Know

Massachusetts Listed Not Listed **New Jersey** Pennsylvania Listed California Proposition 65: Not Listed

Other Information

NFPA Rating: **HMIS Classification:** Health: Health: 0 Flammability: Flammability: 1 Physical: 0 Instability:

International Inventories

Canada: DSL On DSL EC-No: 203-906-6

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.