



Material Safety Data Sheet

Ethylene glycol monomethyl ether

MSDS# 14340

Section 1 - Chemical Product and Company Identification

MSDS Name: Ethylene glycol monomethyl ether
Catalog Numbers: AC610391000, E182-20, E182-4, E182-500, NC9585489
Synonyms: Methyl Cellosolve; Ethylene glycol methyl ether; EGME; 2-Methoxyethanol; 2-ME.

Company Identification:
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
201-796-7100
201-796-7100
800-424-9300

For information in the US, call:
Emergency Number US:
CHEMTREC Phone Number, US:

Section 2 - Composition, Information on Ingredients

CAS#: 109-86-4
Chemical Name: Ethylene glycol monomethyl ether
%: >98
EINECS#: 203-713-7

Hazard Symbols:



T

Risk Phrases:

60 61 10 20/21/22

Section 3 - Hazards Identification EMERGENCY OVERVIEW

Warning! Flammable liquid and vapor. Harmful if inhaled. May form explosive peroxides. May cause central nervous system effects. May cause blood abnormalities. May be harmful if swallowed or absorbed through the skin. This material has been reported to be susceptible to autoxidation and therefore should be classified as peroxidizable. May cause harm to the unborn child. May impair fertility. Causes eye and respiratory tract irritation. Target Organs: Blood, central nervous system, reproductive system, testes.

Potential Health Effects

Eye: May cause transient corneal injury. Causes redness and pain.
Skin: May be harmful if absorbed through the skin.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. May cause effects similar to those of acute inhalation. Ingestion of large amounts may cause CNS depression.
Causes respiratory tract irritation. May cause liver and kidney damage. May cause anemia. May cause drowsiness, unconsciousness, and central nervous system depression. Central nervous system effects may include confusion, ataxia (failure of muscular coordination), vertigo, tinnitus, weakness, disorientation, lethargy, drowsiness, and finally coma. Vapors may cause dizziness or suffocation.

Chronic: Prolonged or repeated exposure may cause adverse reproductive effects. Chronic exposure may cause effects similar to those of acute exposure.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.
Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing

contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

Treat symptomatically and supportively. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Flammable liquid and vapor. May form explosive peroxides. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: 285 deg C (545.00 deg F)

Flash Point: 38 deg C (100.40 deg F)

Explosion Limits: Lower: 1.8 vol %

Explosion Limits: Upper: 19.8 vol %

NFPA Rating: health: 2; flammability: 2; instability: 1;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous.

Handling: Keep container tightly closed. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor.

Storage: Keep away from sources of ignition. Store in a tightly closed container. Keep under a nitrogen blanket. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Containers should be dated when opened and tested periodically for the presence of peroxides. Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the container should only be opened remotely by professionals. All peroxidizable substances should be stored away from heat and light and be protected from ignition sources.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Ethylene glycol monomethyl ether	0.1 ppm; Skin - potential	0.1 ppm TWA; 0.3 mg/m3 TWA 200	125 ppm TWA; 80 mg/m3 TWA
	significant contribution to overall exposure	ppm IDLH	
	by the cutaneous route		

OSHA Vacated PELs: Ethylene glycol monomethyl ether: 25 ppm TWA; 80 mg/m3 TWA

CERCLA Hazardous
Substances and
corresponding RQs
SARA Section 302
Extremely Hazardous
Substances

SARA Codes

Section 313

Clean Air Act:

Clean Water Act:

OSHA:

STATE

California Prop 65

California No Significant
Risk Level:

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 61 May cause harm to the unborn child.

R 10 Flammable.

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 60 May impair fertility.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 109-86-4: 1

Canada

CAS# 109-86-4 is listed on Canada's DSL List

Canadian WHMIS Classifications: B3, D2A, D1B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 109-86-4 is listed on Canada's Ingredient Disclosure List

Section 16 - Other Information

MSDS Creation Date: 6/01/1999

Revision #9 Date 9/14/2006

Revisions were made in Sections: 11

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied.

None of the chemicals in this material have an RQ.

None of the chemicals in this product have a TPQ.

CAS # 109-86-4: acute, chronic, flammable.

This material contains Ethylene glycol monomethyl eth (CAS# 109-86-4, 98%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.

CAS# 109-86-4 listed as Glycol ethers (except for EGBE) is listed as a hazardous air pollutant (HAP). This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

Ethylene glycol monomethyl eth can be found on the following state right to know lists:

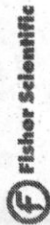
California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

The following statement(s) is(are) made in order to comply with the California Safe Drinking

Water Act: WARNING: This product contains Ethylene glycol monomethyl eth, a chemical known to the state of California to cause birth defects or other reproductive harm.

None of the chemicals in this product are listed.

with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.



MATERIAL SAFETY DATA SHEET (MSDS)

IMPORTANT SAFETY INFORMATION - DO NOT DISCARD
PLEASE ROUTE TO COMPANY SAFETY OFFICER

SCHOOLCRAFT COLLEGE
18600 HAGGERTY RD
LIVONIA, MI 48152-2696

A90370521 - PO# 104909

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Fax number: 412-490-8098

E-mail: mike.burkhardt@thermofisher.com

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MSDSs enclosed:

MSDS enclosed for:
14340 !!DISCREPANCY DATA!!

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