

tetraglyme 143-24-8 MSDS

Section 1 - Chemical Product

MSDS Name: Tetraethylene Glycol Dimethyl Ether 99% Material Safety Data Sheet

Synonym: Bis[2-(2-methoxyethoxy)ethyl] ether; 2,5,8,11,14-Pentaoxapentadecane; Tetraglym

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content
143-24-8	Tetraethylene glycol dimethyl ether	99

Hazard Symbols: XI

Risk Phrases: 36

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Irritating to eyes. Hygroscopic (absorbs moisture from the air). Air sensitive.

Potential Health Effects

Eye:

Causes eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause digestive tract disturbances.

Inhalation:

May cause respiratory tract irritation.

Chronic:

No information found.

Section 4 - FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water.

Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Remove from exposure and move to fresh air immediately. 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

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

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. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 143-24-8: Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: colorless

Odor: None reported.
pH: Not available.
Vapor Pressure: Not available.
Viscosity: 20.00 deg C
Boiling Point: 275.0 - 276.0 deg C
Freezing/Melting Point: -30 deg C
Autoignition Temperature: 200 deg C (392.00 deg F)
Flash Point: 116 deg C (240.80 deg F)
Explosion Limits, lower: .80 vol %
Explosion Limits, upper: .00 vol %
Decomposition Temperature:
Solubility in water: soluble
Specific Gravity/Density: 1.0090g/cm3
Molecular Formula: C10H22O5
Molecular Weight: 222.28

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, strong oxidants, moist air.

Incompatibilities with Other Materials:

Strong acids - oxidizing agents - oxygen.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, acrid smoke and fumes.

Hazardous Polymerization: Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 143-24-8: SB0400000 LD50/LC50:

CAS# 143-24-8: Draize test, rabbit, eye: 500 mg Mild; Oral, rat: LD50 = 5140 mg/kg.

Carcinogenicity:

Tetraethylene glycol dimethyl ether - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - TRANSPORT INFORMATION

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36 Irritating to eyes.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 143-24-8: 1

Canada

CAS# 143-24-8 is listed on Canada's DSL List.

CAS# 143-24-8 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 143-24-8 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

N/A