

Material Safety Data Sheet

Date Created: 03/07/2009

Date Updated: 02/06/2010

Version: 1.0

Section 1 - Product And Company Information

Product Triethylene Glycol Diemthyl Ether (TRIEDM)
Product No D022
Company Dynamic N.A. Inc
Address 23 Captains Walk, Milford, CT 06460, U.S.A.
Phone 1 914 965 2077
Fax 1 914 375 2093

Section 2 - Composition/Information On Ingredients

Synonyms 1,2-Bis(2-methoxyethoxy)ethane, Dimethyltriglycol, Triglyme
CAS # 112-49-2
Formula C₈H₁₈O₄

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

OSHA Hazards: Reproductive hazard

OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION

May form explosive peroxides.

GHS LABEL ELEMENTS, including precautionary statements

Signal word Danger

Hazard statement(s)

H360 May damage fertility or the unborn child.

Precautionary statement(s)

P201 Obtain special instructions before use.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

HMIS CLASSIFICATION

Health Hazard: 0

Chronic Health Hazard: *

Flammability: 1

Physical hazards: 1

NFPA RATING

Health Hazard: 0

Fire: 1

Reactivity Hazard: 1

POTENTIAL HEALTH EFFECTS

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed.

Section 4 - First Aid Measures

GENERAL ADVICE

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

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

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 - Fire Fighting Measures

SUITABLE EXTINGUISHING MEDIA

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Material Safety Data Sheet

Date Created: 03/07/2009

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Wear self contained breathing apparatus for fire fighting if necessary.

Section 6 - Accidental Release Measures

PERSONAL PRECAUTIONS

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

ENVIRONMENTAL PRECAUTIONS

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

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

PRECAUTIONS FOR SAFE HANDLING

Avoid inhalation of vapour or mist.

Normal measures for preventive fire protection.

CONDITIONS FOR SAFE 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 in cool place.

Hygroscopic. Handle and store under inert gas.

Section 8 - Exposure Controls / Personal Protection

Contains no substances with occupational exposure limit values.

PERSONAL PROTECTIVE EQUIPMENT**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

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

SKIN AND 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.

HYGIENE MEASURES

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

Section 9 - Physical And Chemical Properties

Appearance	Colorless clear liquid
Molecular Weight:	178.23 g/mol
pH	n/a
Melting point	-45 °C (-49 °F) - lit.
Boiling point	216 °C (421 °F) - lit.
Flash point	113 °C (235 °F) - closed cup
Ignition temperature	191 °C (376 °F)
Lower explosion limit	no data available
Upper explosion limit	no data available
Density	0.986 g/cm ³ at 25 °C (77 °F)

Material Safety Data Sheet

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Water solubility no data available
Relative vapour 6.15
Density - (Air = 1.0)

Section 10 - Stability and Reactivity

CHEMICAL STABILITY

Stable under recommended storage conditions.

MATERIALS TO AVOID

Strong oxidizing agents, , Strong acids

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section 11 - Toxicological Information

ACUTE TOXICITY

TDLo Intraperitoneal - rat - 4,456 mg/kg

Remarks: Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels: Other oxidoreductases.

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

Reproductive toxicity - mouse - female - Oral

Effects on Newborn: Live birth index (# fetuses per litter; measured after birth).

Reproductive toxicity - mouse - male - Oral

Effects on Fertility: Other measures of fertility Effects on Newborn: Live birth index (# fetuses per litter; measured after birth).

Reproductive toxicity - mouse - male - Oral

Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Reproductive toxicity - mouse - female - Oral

Effects on Newborn: Sex ratio. Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Reproductive toxicity - mouse - female - Oral

Specific Developmental Abnormalities: Craniofacial (including nose and tongue). Specific Developmental Abnormalities: Musculoskeletal system.

Reproductive toxicity - mouse - female - Oral

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Reproductive toxicity - rabbit - female - Oral

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Reproductive toxicity - mouse - female - Oral

Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number

of implants). Effects on Fertility: Litter size (e.g., # fetuses per litter; measured before birth).

Reproductive toxicity - mouse - female - Oral

Maternal Effects: Uterus, cervix, vagina.

Reproductive toxicity - rabbit - female - Oral

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Sigma-Aldrich - T59803 Page 5 of 6

Reproductive toxicity - rabbit - female - Oral

Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Embryo or Fetus: Fetal death.

Material Safety Data Sheet

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Reproductive toxicity - rabbit - female - Oral

Specific Developmental Abnormalities: Skin and skin appendages. Specific Developmental Abnormalities: Musculoskeletal system. Specific Developmental Abnormalities: Urogenital system.

Presumed human reproductive toxicant

Specific POTENTIAL HEALTH EFFECTS

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ADDITIONAL INFORMATION

RTECS: XF0665000

Section 12 - Ecological Information

n/a

Section 13 - Disposal Considerations

PRODUCT

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste

disposal service to dispose of this material.

CONTAMINATED PACKAGING

Dispose of as unused product.

Section 14 - Transport Information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Section 15 - Regulatory Information

OSHA HAZARDS

Reproductive hazard

DSL STATUS

All components of this product are on the Canadian DSL list.

SARA 302 COMPONENTS

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

SARA 313 COMPONENTS

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 HAZARDS

Chronic Health Hazard

Section 16 - Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.