

# SAFETY DATA SHEET

Revision Date 24-Dec-2021

Revision Number 5

## 1. Identification

**Product Name** Tetraethylene glycol dimethyl ether

**Cat No. :** AC174110000; AC174110010; AC174110025; AC174112500

**CAS No** 143-24-8  
**Synonyms** 2,5,8,11,14-Pentaoxapentadecane; Bis[2-(2-methoxyethoxy)ethyl] ether; Dimethoxytetraglycol; Tetraglyme

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

### Details of the supplier of the safety data sheet

**Company**

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**Emergency Telephone Number** For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Reproductive Toxicity

Category 1B

**Label Elements****Signal Word**

Danger

**Hazard Statements**

May damage fertility. May damage the unborn child

**Precautionary Statements****Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

**Response**

IF exposed or concerned: Get medical attention/advice

**Storage**

Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

### 3. Composition/Information on Ingredients

Component	CAS No	Weight %
2,5,8,11,14-Pentaoxapentadecane	143-24-8	<= 100

### 4. First-aid measures

<b>General Advice</b>	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician or poison control center immediately.
<b>Most important symptoms and effects</b>	None reasonably foreseeable.
<b>Notes to Physician</b>	Treat symptomatically

### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.
<b>Unsuitable Extinguishing Media</b>	No information available

Flash Point	141 °C / 285.8 °F
Method -	No information available
Autoignition Temperature	260 °C / 500 °F
Explosion Limits	
Upper	No data available
Lower	0.4%
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

**Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA**

Health  
1

Flammability  
1

Instability  
1

Physical hazards  
N/A

## 6. Accidental release measures

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
Environmental Precautions	Should not be released into the environment.

**Methods for Containment and Clean Up** Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

## 7. Handling and storage

Handling	Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.
Storage.	Keep containers tightly closed in a dry, cool and well-ventilated place. Do not allow contact with air. Incompatible Materials. Strong acids. Strong oxidizing agents. oxygen.

## 8. Exposure controls / personal protection

<u>Exposure Guidelines</u>	This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.
Engineering Measures	Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.
<u>Personal Protective Equipment</u>	
Eye/face Protection	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 and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**

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.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<b>Physical State</b>	Liquid
<b>Appearance</b>	Clear
<b>Odor</b>	No information available
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point/Range</b>	-30 °C / -22 °F
<b>Boiling Point/Range</b>	275 - 276 °C / 527 - 528.8 °F 760 mmHg
<b>Flash Point</b>	141 °C / 285.8 °F
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid,gas)</b>	Not applicable
<b>Flammability or explosive limits</b>	
Upper	No data available
Lower	0.4%
<b>Vapor Pressure</b>	0.099 Pa @ 20 °C
<b>Vapor Density</b>	7.7
<b>Density</b>	1.0121 g/cm3
<b>Specific Gravity</b>	No information available
<b>Solubility</b>	Soluble in water
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	260 °C / 500 °F
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	4.1 cPs at 20 °C
<b>Molecular Formula</b>	C10 H22 O5
<b>Molecular Weight</b>	222.28
<b>Surface tension</b>	66.7 mN/m @ 20°C [1 g/l]

## 10. Stability and reactivity

<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Air sensitive. May form explosive peroxides on prolonged storage.
<b>Conditions to Avoid</b>	Incompatible products. Excess heat. Exposure to air.
<b>Incompatible Materials</b>	Strong acids, Strong oxidizing agents, oxygen
<b>Hazardous Decomposition Products</b>	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

## 11. Toxicological information

**Acute Toxicity****Product Information****Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
2,5,8,11,14-Pentaoxapentadecane	LD50 = 5140 mg/kg ( Rat )	Not listed	Not listed

**Toxicologically Synergistic Products** No information available

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

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
2,5,8,11,14-Pentaoxapentadecane	143-24-8	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** No information available

**Reproductive Effects** May cause harm to the unborn child. May impair fertility.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information**

**Other Adverse Effects** .

## 12. Ecological information

### Ecotoxicity

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

**Persistence and Degradability** Miscible with water Persistence is unlikely based on information available. Soluble in water

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Will likely be mobile in the environment due to its water solubility.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

## 15. Regulatory information

### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
2,5,8,11,14-Pentaoxapentadecane	143-24-8	X	ACTIVE	SP

**Legend:**

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

SP - Indicates a substance that is identified in a proposed SNUR

**TSCA 12(b)** - Notices of Export

Component	CAS No	TSCA 12(b) - Notices of Export
2,5,8,11,14-Pentaoxapentadecane	143-24-8	Section 5

**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
2,5,8,11,14-Pentaoxapentadecane	143-24-8	X	-	205-594-7	X	X	X	X	X	KE-03259

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)**U.S. Federal Regulations****SARA 313** Not applicable**SARA 311/312 Hazard Categories** See section 2 for more information**CWA (Clean Water Act)** Not applicable**Clean Air Act** Not applicable**OSHA** - Occupational Safety and Health Administration Not applicable**CERCLA** Not applicable**California Proposition 65** This product does not contain any Proposition 65 chemicals.**U.S. State Right-to-Know Regulations** Not applicable**U.S. Department of Transportation**

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.**Other International Regulations****Mexico - Grade** Slight risk, Grade 1**Authorisation/Restrictions according to EU REACH**

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
2,5,8,11,14-Pentaoxapentadecane	-	Use restricted. See item 75.	SVHC Candidate list - 205-594-7 -

e	(see link for restriction details)	Toxic for reproduction Article 57c
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After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

<https://echa.europa.eu/authorisation-list>

<https://echa.europa.eu/substances-restricted-under-reach>

<https://echa.europa.eu/candidate-list-table>

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
2,5,8,11,14-Pentaoxapentadecane	143-24-8	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
2,5,8,11,14-Pentaoxapentadecane	143-24-8	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

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**Revision Date** 24-Dec-2021  
**Print Date** 24-Dec-2021  
**Revision Summary** SDS sections updated.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**