



# Material Safety Data Sheet

<b>NFPA</b>  	<b>HMIS</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; font-weight: bold;">1</td> </tr> <tr> <td style="background-color: #FFCCCC;">Fire Hazard</td> <td style="text-align: center; font-weight: bold;">1</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; font-weight: bold;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	1	Reactivity	0	<b>Personal Protective Equipment</b>    See Section 15.
Health Hazard	1							
Fire Hazard	1							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
<b>Common Name/Trade Name</b>	Tetraethylene Glycol Dimethyl Ether	<b>Catalog Number(s)</b> T2630
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>CAS#</b> 143-24-8
<b>Commercial Name(s)</b>	Not available.	<b>RTECS</b> SB0400000
<b>Synonym</b>	Bis(2-(2-methoxyethoxy)ethyl)ether; Dimethoxy Tetraglycol; Ether, bis(2-(2-methoxyethoxy)ethyl); Dimethoxytetraethylene glycol; Tetraglyme	<b>TSCA</b> TSCA 8(b) inventory: Tetraethylene Glycol Dimethyl Ether
<b>Chemical Name</b>	2,5,8,11,14-Pentaoxapentadecane	<b>CI#</b> Not available.
<b>Chemical Family</b>	Not available.	<b>IN CASE OF EMERGENCY</b> <b>CHEMTREC (24hr) 800-424-9300</b>  CALL (310) 516-8000
<b>Chemical Formula</b>	C10-H22-O5	
<b>Supplier</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	
1) Tetraethylene Glycol Dimethyl Ether	143-24-8				100
<b>Toxicological Data on Ingredients</b>	<b>Tetraethylene Glycol Dimethyl Ether:</b> ORAL (LD50): Acute: 5140 mg/kg [Rat].				

Section 3. Hazards Identification	
<b>Potential Acute Health Effects</b>	Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
<b>Potential Chronic Health Effects</b>	<b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. The substance may be toxic to kidneys, liver, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
<b>Serious Skin Contact</b>	Not available.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	May be combustible at high temperature.
<b>Auto-Ignition Temperature</b>	200°C (392°F)
<b>Flash Points</b>	CLOSED CUP: 116°C (240.8°F). OPEN CUP: 141°C (285.8°F).
<b>Flammable Limits</b>	UPPER: 80%
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ).
<b>Fire Hazards in Presence of Various Substances</b>	Slightly flammable to flammable in presence of open flames and sparks, of heat.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7. Handling and Storage**

<b>Precautions</b>	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area.

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
<b>Personal Protection</b>	Safety glasses. Lab coat.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Exposure Limits</b>	Not available.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Liquid.	<b>Odor</b>	Odorless.
<b>Molecular Weight</b>	222.28 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not available.	<b>Color</b>	Colorless.
<b>Boiling Point</b>	275°C (527°F)		
<b>Melting Point</b>	-30°C (-22°F)		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	1.009 - 1.0132(Water = 1)		
<b>Vapor Pressure</b>	Not available.		
<b>Vapor Density</b>	7.7 (Air = 1)		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	See solubility in water.		
<b>Solubility</b>	Soluble in cold water.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Excess heat, incompatible materials
<b>Incompatibility with various substances</b>	Reactive with oxidizing agents.
<b>Corrosivity</b>	Not available.

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**Special Remarks on Reactivity** Not available.

**Special Remarks on Corrosivity** Not available.

**Polymerization** Will not occur.

### Section 11. Toxicological Information

**Routes of Entry** Absorbed through skin. Eye contact.

**Toxicity to Animals** Acute oral toxicity (LD50): 5140 mg/kg [Rat].

**Chronic Effects on Humans** May cause damage to the following organs: kidneys, liver, central nervous system (CNS).

**Other Toxic Effects on Humans** Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals** Not available.

**Special Remarks on Chronic Effects on Humans** May cause adverse reproductive effects based on animal test data.

**Special Remarks on other Toxic Effects on Humans**

Acute Potential Health Effects:  
 Skin: May cause skin irritation.  
 Eyes: Can cause mild eye irritation.  
 Inhalation: Inhalation of mist or vapor may cause respiratory tract irritation. May cause nausea, headache, blurred vision. May affect behavior/central nervous system (drowsiness, somnolence, symptoms of drunkenness), kidneys, liver.  
 Ingestion: May cause digestive tract disturbances with nausea, vomiting, diarrhea, blurred vision, headache. May affect behavior/central nervous system(drowsiness, somnolence, symptoms of drunkenness), urinary system (kidneys), liver.  
 Chronic Potential Health Effects:  
 Ingestion and Inhalation: Prolonged or repeated ingestion or inhalation may cause symptoms similar to acute ingestion and inhalation.

### Section 12. Ecological Information

**Ecotoxicity** Not available.

**BOD5 and COD** Not available.

**Products of Biodegradation** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation** Not available.

### Section 13. Disposal Considerations


**Waste Disposal** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 14. Transport Information**

**DOT Classification** Not a DOT controlled material (United States).

**Identification** Not applicable.

**Special Provisions for Transport** Not applicable.

**DOT (Pictograms)** 

**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations** TSCA 8(b) inventory: Tetraethylene Glycol Dimethyl Ether


**California Proposition 65 Warnings** California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.  
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.


**Other Regulations** EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 205-594-7).  
Canada: Listed on Canadian Domestic Substance List (DSL).  
China: Listed on National Inventory.  
Japan: Listed on National Inventory (ENCS).  
Korea: Listed on National Inventory (KECI).  
Philippines: Listed on National Inventory (PICCS).  
Australia: Listed on AICS.

**Other Classifications**  
**WHMIS (Canada)** Not controlled under WHMIS (Canada).  
**DSCL (EEC)** This product is not classified according to the EU regulations. Not applicable.

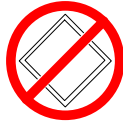
<b>HMIS (U.S.A.)</b>	<b>Health Hazard</b> 1	<b>National Fire Protection Association (U.S.A.)</b>	
	<b>Fire Hazard</b> 1		
	<b>Reactivity</b> 0		
	<b>Personal Protection</b> a		

**WHMIS (Canada) (Pictograms)** 

**DSCL (Europe) (Pictograms)** 

**TDG (Canada) (Pictograms)** 

**ADR (Europe)  
(Pictograms)**



**Protective Equipment**



Not applicable.  
Lab coat.



Not applicable.  
Safety glasses.

**Section 16. Other Information**

**MSDS Code** T2228

**References** Not available.

**Other Special Considerations** Not available.

Validated by Sonia Owen on 12/7/2006.

Verified by Sonia Owen.  
Printed 3/13/2007.

CALL (310) 516-8000

**Notice to Reader**

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*