



# Material Safety Data Sheet

<p><b>NFPA</b></p> 	<p><b>HMIS</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">2</td> </tr> <tr> <td style="background-color: #FFCCCC;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">2</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	2	Reactivity	0	<p><b>Personal Protective Equipment</b></p>  <p style="text-align: center;">See Section 15.</p>
Health Hazard	2							
Fire Hazard	2							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
<b>Common Name/Trade Name</b>	<b>Bis(2-Methoxyethyl) ether</b>	<b>Catalog Number(s)</b> B1099
<b>Manufacturer</b>	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>CAS#</b> 111-96-6
<b>Commercial Name(s)</b>	Not available.	<b>RTECS</b> Not available.
<b>Synonym</b>	Diglyme	<b>TSCA</b> TSCA 8(b) inventory: Bis(2-Methoxyethyl) ether
<b>Chemical Name</b>		<b>CI#</b> Not available.
<b>Chemical Family</b>	Not available.	<p style="color: blue; margin: 0;"><b>IN CASE OF EMERGENCY</b></p> <p style="color: blue; margin: 0;"><b>CHEMTREC (24hr) 800-424-9300</b></p> <p style="margin: 0;">CALL (310) 516-8000</p>
<b>Chemical Formula</b>	C6H14O3	
<b>Supplier</b>	SPECTRUM CHEMICAL MFG. CORP. 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) {Bis(2-)Methoxyethyl) ether	111-96-6				100
<b>Toxicological Data on Ingredients</b>	<b>Bis(2-Methoxyethyl) ether</b> LD50: Not available. LC50: Not available.				

Section 3. Hazards Identification	
<b>Potential Acute Health Effects</b>	Very hazardous in case of ingestion. Hazardous in case of skin contact (permeator), of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (irritant).
<b>Potential Chronic Health Effects</b>	Very hazardous in case of ingestion. Hazardous in case of skin contact (permeator), of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (irritant). <b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available.

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.
<b>Skin Contact</b>	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
<b>Serious Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
<b>Inhalation</b>	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	Combustible.
<b>Auto-Ignition Temperature</b>	205°C (401°F)
<b>Flash Points</b>	CLOSED CUP: 67°C (152.6°F). OPEN CUP: 70°C (158°F).
<b>Flammable Limits</b>	Not available.
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ).
<b>Fire Hazards in Presence of Various Substances</b>	Not available.
<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>	Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. 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 breathe gas/fumes/ vapour/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes.
<b>Storage</b>	Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. Keep container dry. Keep in a cool place.

**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>	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. 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>	Not available.
<b>Molecular Weight</b>	134.17 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not available.	<b>Color</b>	Not available.
<b>Boiling Point</b>	162°C (323.6°F)		
<b>Melting Point</b>	-68°C (-90.4°F)		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	0.937 (Water = 1)		
<b>Vapor Pressure</b>	3 mm of Hg (@ 20°C)		
<b>Vapor Density</b>	4.6 (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>	Easily 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>	Not available.
<b>Incompatibility with various substances</b>	Not available.

Continued on Next Page

**Corrosivity** Non-corrosive in presence of glass.

**Special Remarks on Reactivity** Not available.

**Special Remarks on Corrosivity** Not available.

**Polymerization** No.

### **Section 11. Toxicological Information**

**Routes of Entry** Dermal contact. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals** LD50: Not available.  
LC50: Not available.

**Chronic Effects on Humans** Not available.

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

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

**Special Remarks on Chronic Effects on Humans** Causes sperm abnormalities in animal. Passes through the placental barrier in animal.

**Special Remarks on other Toxic Effects on Humans** Not available.

### **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 products of degradation are more toxic.

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

### **Section 13. Disposal Considerations**

**Waste Disposal**

### **Section 14. Transport Information**

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

**Identification** Not applicable.

**Special Provisions for Transport** No DOT, ref 49CFR, 173.150

**Continued on Next Page**

DOT (Pictograms)



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

**Federal and State Regulations**

TSCA 8(b) inventory: Bis(2-Methoxyethyl) ether  
 SARA 313 toxic chemical notification and release reporting: Bis(2-Methoxyethyl) ether  
 CERCLA: Hazardous substances.: Bis(2-Methoxyethyl) ether

**California Proposition 65 Warnings**

**Other Regulations**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications**

**WHMIS (Canada)** CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).

**DSCL (EEC)** R36- Irritating to eyes.

**HMIS (U.S.A.)**

Health Hazard	2
Fire Hazard	2
Reactivity	0
Personal Protection	h

**National Fire Protection Association (U.S.A.)**

Health  Flammability  
 Reactivity  
 Specific hazard

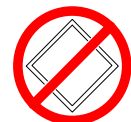
**WHMIS (Canada) (Pictograms)**



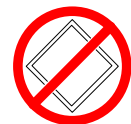
**DSCL (Europe) (Pictograms)**



**TDG (Canada) (Pictograms)**



**ADR (Europe) (Pictograms)**



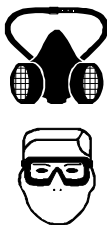
**Protective Equipment**



Gloves.



Lab coat.



Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Splash goggles.

**Section 16. Other Information**

**MSDS Code** B3630

**References** Not available.

**Other Special Considerations** Not available.

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

Printed 9/12/2006.

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.*