



**POLIOLES, S.A. DE C.V.**

## Material Safety Data Sheet

### POLIOLES, S.A. DE C.V.

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Jerma Plant (01-722) 2.65.86.00 Polioles

BOTH NUMBERS ARE AVAILABLE DAYS, NIGHTS, WEEKENDS, & HOLIDAYS.

## SECTION 1 - PRODUCT INFORMATION

### PRODUCT NAME

**DIETHYLENE GLYCOL**

### Product ID:

5000011

### Common Chemical Name:

Diethylene Glycol, 2,2-Oxydiethanol

### Synonyms:

DEG, Diglycol

### Molecular Formula:

C<sub>4</sub>H<sub>10</sub>O<sub>3</sub>

### Chemical Family:

Glycols

### Molecular Wt.:

106.12

## SECTION 2 - INGREDIENTS

Chemical Name:	CAS	Amount	PEL/TLV-SOURCE
Diethylene Glycol	111-46-6	98 %	A.C.G.I.H.
Monoethylene Glycol	107-21-1	1%	A.C.G.I.H.
Triethylene Glycol	112-27-6	1%	A.C.G.I.H.

## SECTION 3 - HAZARDS IDENTIFICATION

### Emergency Overview

**Color:** Colorless

**Form/Appearance:** Liquid

**Odor:** None

### WARNING STATEMENT:

### CAUTION:

Contact with the eyes and skin may cause irritation. Inhalation may result in irritation.

### Potential Health Effects

#### Primary Routes of Exposure:

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

#### Acute overexposure Effects:

Inhalation may result in respiratory irritation. Ingestion may result in gastric disturbances.

#### Chronic overexposure Effects:

There are no known chronic effects associated with this material.

### SECTION 3 - HAZARDS IDENTIFICATION (cont.)

**First Aid Procedures - Aggravated Medical Conditions:**

No data is available which addresses medical conditions that are generally recognized as being aggravated by exposure to this product. Please refer to Section 3 (Effects of Overexposure) for effects observed in animals.

**Swallowing**

Moderately toxic. May cause headache, dizziness, incoordination, nausea, vomiting, diarrhea and general weakness. Ingestion of significant quantities may result in red blood cell hemolysis.

**Skin absorption**

Penetrates skin readily. Frequent or widespread contact may result in the absorption of potentially harmful amounts of material. Signs and symptoms of toxicity are similar to those of swallowing.

**Inhalation**

High concentrations are irritating to the eyes and respiratory tract. May cause headache, dizziness, nausea, vomiting, and malaise.

**Eye contact**

Causes severe irritation and pain, seen as excess tearing and blinking with marked excess redness and swelling of the conjunctiva.

### SECTION 4 - FIRST AID MEASURES

**First Aid Procedures - skin:**

Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. Get immediate medical attention.

**First Aid Procedures - Eyes:**

Immediately rinse eyes with running water for 15 minutes. Get immediate medical attention :

**First Aid Procedures - ingestion:**

If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

**First Aid Procedures - Inhalation:**

Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

**First Aid Procedures - Notes to Physician:**

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

**First Aid Procedures - Aggravated Medical Conditions:**

No data is available which addresses medical conditions that are generally recognized as being aggravated by exposure to this product. Please refer to Section 3 (Effects of Overexposure) for effects observed in animals.

**First Aid Procedures - Special Precautions:**

None

### SECTION 5 - FIRE FIGHTING MEASURES

	Typical	Low/High	Deg.	Method
<b>Flash Point:</b>	140°	°C		PENSKY-MARTENS DIN 51758
<b>Autoignition:</b>	345°	°C		DIN 51794
<b>Inf. Limits:</b>		1.8/12.8	%	ASTM E-1232-91
<b>Vapor Density (Air=1):</b>	3.66			

**Extinguishing Media:**

Apply alcohol type or all purpose type foams by manufactures recommended techniques for large fire. Use water fog, foam, CO<sub>2</sub> or dry chemical extinguishing media for small fires.

**Fire Fighting Procedures:**

Firefighters should be equipped with self-contained breathing apparatus and turn out gear.

**Unusual Hazards:**

This material may produce a floating fire hazard in extreme fire conditions.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**General:**

Spills should be contained, solidified and placed in suitable containers for disposal at a licensed facility.

## SECTION 7 - STORAGE AND HANDLING

**General:**

Store in a ventilated storage area between 20°-30°C. Avoid excessive temperatures, low or high. Avoid moisture.

**Other Storage and Handling Data:**

There is no specific requirement of storage.

## SECTION 8 - PERSONAL PROTECTION

**Clothing:**

Gloves, coveralls, apron, boots as necessary to prevent skin contact.

**Eyes:**

Chemical goggles; also wear a face shield if splashing hazard exists.

**Respiration:**

Approved organic vapor mist respirator as necessary.

**Ventilation:**

Use local exhaust to control vapors/mists.

**Explosion Proofing:**

None required.

**Other Personal Protection Data:**

Avoid contact with skin as required by good normal hygiene practices.

## SECTION 9 - PHYSICAL PROPERTIES

<b>Color:</b>	Colorless			
<b>Form/Appearance:</b>	Liquid			
<b>Odor:</b>	None			
<b>Odor Intensity:</b>	N/A			
<b>Specific Gravity:</b>	<b>Typical</b>	<b>Low/High</b>	<b>U.O.M.</b>	
	1.1160	1.1158/1.1168	g/cm <sup>3</sup> @ 20°C	
<b>Viscosity:</b>	38.8		mPa·s @ 20°C.	
<b>Boiling Pt:</b>	<b>Typical</b>	<b>Low/High</b>	<b>Deg.</b>	<b>Pressure</b>
	244.7°	243.8°/246.8°	°C	760 mmHg
<b>Freezing Pt:</b>	-8°		°C	
<b>Solubility in Water:</b>	Freely miscible with water			
<b>Solubility:</b>	<b>Typical</b>	<b>Low/High</b>	<b>U.O.M.</b>	<b>Temperature</b>
	Soluble			
<b>pH:</b>	≈ 7.0			
<b>Steam pressure @ 80°C mm Hg:</b>	0.767			

## SECTION 10 - STABILITY AND REACTIVITY

**Stability Data:**

Stable

**Incompatibility:**

Avoid moisture to protect product quality.

**Conditions/Hazards to Avoid:**

Avoid contamination with alkalis and Exposure to moisture and temperatures > 80°F.

**Hazardous Decomposition:**

Hazardous decomposition products: CO and CO<sub>2</sub>.

**Hazardous Polymerization:**

Not occur.

**Corrosive Properties:**

Not Corrosive.

**Oxidizer Properties:**

Not an Oxidizer

**Other reactivity Data:**

None known.

## SECTION 11 - TOXICOLOGY DATA

Experience gained on human beings.

**Diethylene Glycol**

LD <sub>50</sub> oral (rats)	14.8 – 20.8 g/kg.
LD <sub>50</sub> oral (Guinea-Pigs)	7.8 ml/kg

## SECTION 12 - ECOLOGICAL INFORMATION

**Biological eliminability:** Good.

Experience has shown that butyl glycol does not give rise to any troubles in water treatment plants, if the principle of sound industrial practice are observed.

Fish Toxicity LC<sub>50</sub> after 96 hours > 1000 gr/l.

## SECTION 13 - DISPOSAL CONSIDERATIONS

**Waste Disposal:**

Incinerate or bury in a licensed facility. Do not discharge into waterways or sewer systems without proper authority.

**Container Disposal:**

Steel drums must be emptied (as defined by RCRA, Section 261.7 or state regulations that may be more stringent) and can be sent to a licensed drum reconditioned for reuse, a scrap metal dealer or an approved landfill. Drums destined for a scrap dealer or landfill to be punctured or crushed to prevent reuse.

## SECTION 14 - REGULATORY INFORMATION

**TSCA Inventory Status:**

Listed on Inventory: YES

**RCRA Haz. Waste No.:** N/A

**CERCLA:** NO **Reportable Qty.:** (If YES)

SARA TITLE III; SECTION 313: NOT LISTED

**Government Regulation:**

Name:	Diethylene Glycol	Monoethylene Glycol	Triethylene Glycol
Cas Number:	111-46-6	107-21-1	112-27-6

THIS PRODUCT CONTAINS ONE OR MORE CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, AND/OR OTHER REPRODUCTIVE HARM.

**SECTION 16 – OTHER INFORMATION**

**Hazard Ratings:**

POLIOLES currently uses the National Paint & Coating Association (NPCA) rating system. The use of an asterisk (\*) in the HMIS rating indicates the potential for chronic health effects.

	<b>Health:</b>	<b>Fire:</b>	<b>Reactivity:</b>	<b>Special:</b>
HMIS	1	0	0	NA

This product is not hazardous according to the OSHA Hazard Communication Standard.

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POLIOLES, S.A. DE C.V. WILL NOT MAKE ITS PRODUCTS AVAILABLE TO CUSTOMERS FOR USE IN THE MANUFACTURE OF MEDICAL DEVICES WHICH ARE INTENDED FOR PERMANENT IMPLANTATION IN THE HUMAN BODY OR IN PERMANENT CONTACT WITH INTERNAL BODILY TISSUES OR FLUIDS. WE AT POLIOLES TAKE PRIDE IN OUR PRODUCTS, AND OUR TRADITION OF DEVELOPING INNOVATIVE APPLICATIONS IN PARTNERSHIP WITH OUR CUSTOMERS. HOWEVER, THE POSSIBILITY OF BEING REQUIRED TO RESPOND TO UNFOUNDED LITIGATION AND/OR CLAIMS ARISING OUT OF CONCERNS RELATING TO SUCH USE PRESENTS AN UNACCEPTABLE RISK TO THE COMPANY.

**END OF DATA SHEET**

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