

### **1 - Product and Company Identification**

**Product name:** Mulsifan 300 MO

**Product type/usage/industry:** Polyethylene Glycol 300 Monooleate

**Manufacturer/Supplier Information:** Zschimmer and Schwarz, Inc.  
70 GA Hwy. 22 W  
Milledgeville, GA 31061  
Phone: (478) 454-1942

**Emergency contact:** **Company:** (478) 454-1942  
**CHEMTREC (24HR):** (800) 424-9300

### **2 – Hazards Identification**

**Classification of the substance or mixture:** Classification of this substance/mixture is based on  
**29 CFR 1910.1200/HazCom 2012 (GHS-US)**

Acute Aquatic Toxicity	Category 2	H401	Toxic to aquatic life
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**Labelling:**

**Signal Word:**

None

**Hazard Symbols:**

None

**Precautionary Statements:**

P262: Do not get in eyes, on skin, or on clothing.  
P273: Avoid release to the environment.  
P302+352: IF ON SKIN: Wash with plenty of soap and water.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.  
P314: Get medical advice/attention if you feel unwell.

**Key to Hazard Categories:**

1=Severe Hazard      2=Serious Hazard      3=Moderate Hazard      4=Slight Hazard      5=Minimal Hazard

### **3 – Composition/Information on Ingredients**

**CAS Number**  
9004-96-0

**Material or component**  
Poly(oxy-1,2-ethanediyl),  $\alpha$ -(1-oxo-octadecenyl)- $\omega$ -hydroxy-, (Z)-

**Avg % weight**  
~ 100%

This is not intended to be a complete compositional disclosure. Information provided pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200/ HazCom 2012). See Section 8 for Exposure Limits, if any.

#### **4 - First Aid Measures**

<b>Eyes:</b>	Immediately flush with gentle but large stream of water for 15 min, lifting upper and lower eyelids occasionally. Get medical attention if irritation develops.
<b>Skin:</b>	Wash affected area with soap and water. If itching or redness develops, seek medical attention. Contaminated clothing should be removed immediately and washed before reuse. Contaminated shoes should be discarded.
<b>Inhalation:</b>	Move the person to fresh air. If breathing becomes difficult, contact a physician.
<b>Ingestion:</b>	Do not induce vomiting. If large amounts were swallowed, give water to drink and get medical attention if you feel unwell.

#### **5 - Firefighting Measures**

<b>Extinguishing Media:</b>	Water spray, dry chemical, alcohol foam, or carbon dioxide.
<b>Unsuitable Extinguishing Media:</b>	None known.
<b>Special Protective Equipment for Firefighters:</b>	Self-contained breathing apparatus and protective clothing when fighting any chemical fire.
<b>Unusual Fire &amp; Explosion Hazards:</b>	In case of fire, containers may explode from internal pressure. Cool with water. May emit toxic fumes of CO and CO <sub>2</sub> under fire conditions.

#### **6 - Accidental Release Measures**

<b>Personal precautions:</b>	Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas. Keep away from heat and sources of ignition.
<b>Environmental precautions:</b>	P273: Avoid release to the environment Limit leakage with earth or sand. Do not discharge into the drains/surface water/groundwater. Dispose of absorbed material in accordance with local, state and federal regulations.
<b>Methods for Containment/Cleaning Up:</b>	Take up with absorbent material (e.g. vermiculite, general purpose binder). Dispose of absorbed material in accordance with local, state, and federal regulations.

#### **7 - Handling and Storage**

<b>Handling:</b>	P261: Avoid breathing mists of product P262: Do not get in eyes, on skin, or on clothing P264: Wash thoroughly after handling P280: Wear protective gloves/eye protection
<b>Storage:</b>	P402+404: Store in a dry place. Store in a closed container P403+233: Store in a well ventilated place. Keep container tightly closed Protect from moisture. Store in cool dry places between 32°F (0°C) and 95°F (35°C).
<b>Special Packaging Requirements:</b>	None known.
<b>Incompatible Materials or Fire/Explosion Protection:</b>	Strong oxidizers, strong acids, and strong bases at high temperatures.

## 8 - Exposure Controls/Personal Protection

### Personal Protective Equipment (PPE):

Hand Protection:	Use impervious gloves.
Eye Protection:	Wear safety glasses with side shields.
Skin Protection:	Wear protective clothing.
Respiratory Protection:	Recommended if ventilation is limited.

### Engineering Measures/Controls:

Ventilation:	Ensure adequate ventilation to maintain product at acceptable airborne levels.
Other measures:	Eye-wash station.

### Exposure Limits/Guidelines:

Material	CAS #	BASIS	TYPE	VALUE
None				

## 9 - Physical and Chemical Properties

Form and Appearance:	Clear to slightly hazy, yellow to amber liquid	Odor:	Fatty
pH:	~ 6.5 @ 5%	Odor Threshold:	N/D
Boiling Point:	> 347°F (175°C)	Melting/Freezing point:	N/D
Vapor Pressure:	< 0.01 mmHg @ 20°C	Vapor Density (Air=1):	N/A
Flash Point:	> 302°F (150°C) (COC)	Evaporation Rate:	< 0.01
UEL:	N/A	LEL:	N/A
Viscosity:	N/D	Solubility in Water:	Dispersible
Octanol/Water Partition Coefficient:	~5.94 (lit.)	Specific Gravity/ Bulk Density:	~ 0.99
Auto-ignition temperature:	N/D	Decomposition Temperature:	N/D
Volatile content:	< 1.0%	VOC Data:	N/D

## 10 - Stability and Reactivity

Chemical Stability:	Product is stable under ordinary conditions of use and storage.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Exposure to moist air or water.
Incompatible Materials:	Strong oxidizers, strong acids, and strong bases at high temperatures.
Hazardous Decomposition Products:	Extremely high temperatures may produce CO <sub>x</sub> ; thermal decomposition may produce irritating aldehydes.

**11 - Toxicological Information**

**Acute Data:**

**Principle Routes of Exposure:** Eye contact, skin contact, ingestion, inhalation (mist).

**Acute Toxicity**

Route of exposure:	Test type:	Species:	Results:	Comments:
Oral	LD50	Rat	>2000 mg/kg	H303: May be harmful if swallowed

**Irritation and Corrosion**

Target organ:	Species:	Results:	Comments:
Eyes	Rabbit	Non-irritating	-
Skin	Rabbit	Non-irritating	-

**Sensitization**

Target organ:	Species:	Results:	Comments:
Skin	Human	No effects known	-

**Specific Target Organ Toxicity – Single Exposure**

Target organ:	Species:	Results:	Comments:
None			-

**Chronic Data:**

**Carcinogenicity**

IARC	NTP	ACGIH	OSHA
No	No	No	No

**Mutagenicity:** NDA

**Reproductive Effects:** NDA

**Target Organ Effects:** NDA

## **12 - Ecological Information**

### **Acute Aquatic Toxicity**

<b>Species:</b>	<b>Test type:</b>	<b>Exposure time:</b>	<b>Results:</b>	<b>Comments:</b>
Fish	LC50	96h	1 – 10 mg/l	H401: Toxic aquatic life
Daphnia magna	EC50	48h	1 – 10 mg/l	H401: Toxic aquatic life

### **Environmental Fate**

<b>Persistence/Degradability:</b>	Product is readily biodegradable. >60% in 28d
<b>COD/BOD5:</b>	NDA
<b>Bioaccumulation Potential:</b>	No bioconcentration is expected because of the relatively high water solubility.
<b>Mobility in Soil:</b>	NDA
<b>Other Adverse Effects:</b>	NDA

## **13 - Disposal Considerations**

<b>Product:</b>	Dispose of absorbed material/content and/or container in accordance with local, state, federal and/or international regulations.
<b>Packaging:</b>	NDA

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<b>14 - Transport Regulations</b>
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**US DOT Regulations (Land Transport):**

<b>Proper Shipping Name:</b>	Not regulated.
<b>Hazard Class:</b>	Not regulated.
<b>UN Number:</b>	Not regulated.
<b>Packing Group:</b>	Not regulated.
<b>Label Required:</b>	Not regulated.
<b>Other Information:</b>	Not regulated.

**IATA/ICAO Regulations (Air Transport):**

<b>Proper Shipping Name:</b>	Not regulated.
<b>Hazard Class:</b>	Not regulated.
<b>UN Number:</b>	Not regulated.
<b>Packing Group:</b>	Not regulated.
<b>Label Required:</b>	Not regulated.
<b>Other Information:</b>	Not regulated.

**IMDG/IMO Regulations (Maritime Transport):**

<b>Proper Shipping Name:</b>	Not regulated.
<b>Hazard Class:</b>	Not regulated.
<b>UN Number:</b>	Not regulated.
<b>Packing Group:</b>	Not regulated.
<b>Label Required:</b>	Not regulated.
<b>EMS Number:</b>	Not regulated.
<b>Segregation Groups:</b>	Not regulated.
<b>Marine Pollutant (Y/N):</b>	Not regulated.
<b>Other Information:</b>	Not regulated.

## 15 - Regulatory Information

### Domestic Regulations

#### Components requiring notification

SARA 302 (TPQ)	SARA 304 (RQ)	SARA 313	CERCLA (RQ)	CAA 112(b) HAPS	CAA 112(r)
None	None	None	None	None	None

#### SARA 311/312 Hazard Categorization:

None

### State Information

#### California Proposition 65:

May contain traces (< 100 ppm) of the following components known to the State of California to cause cancer, birth defects, or other reproductive harm.

Ethylene Oxide (75-21-8)  
1,4-Dioxane (123-91-1)

#### State Right to Know/ Hazardous Substance List Information:

The following chemicals are present on one or more Right to Know/Hazardous Substance Lists for the states of MA, MN, NJ, PA and RI.

Ethylene Oxide (75-21-8)  
1,4-Dioxane (123-91-1)  
Polyethylene glycols (25322-68-3)

This is not an exhaustive list. For information on listings in other states, please consult that state's RTK/HSL.

### Chemical Inventories

United States (TSCA)	EUROPE (EINECS/ELINCS/NLP)	Australia (AICS)	Philippines (PICCS)	Canada		Korea (ECL)	Japan (ENCS/ISHL)	China (IECSC)	New Zealand (NZIoC)
				DSL	NDSL				
Yes	Polymer	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes

## 16 - Additional Information

### Key to Abbreviations:

NDA - No data available    N/D - Not determined    N/A - Not applicable    N/E - Not established

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**Date of Issue:** April 7, 2015  
**Date of last revision:** May 26, 2015