

### 1 - Product and Company Identification

**Product name:** Mulsifan 400 MP  
**Product type/usage/industry:** Polyethylene Glycol 400 Monopelargonate  
**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)**

Not classified

**Labelling:**

**Signal Word:**

None

**Hazard Symbols:**

None

**Precautionary Statements:** P273: Avoid release to the environment

**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**  
31621-91-7

**Material or component**  
Poly(oxy-1,2-ethanediyl),a-(1-oxononyl)-w-hydroxy-

**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

**Eyes:** Immediately flush with gentle but large stream of water for 15 min, lifting upper and lower eyelids occasionally. Get medical attention if irritation develops.  
**Skin:** 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.  
**Inhalation:** Move the person to fresh air. If breathing becomes difficult, contact a physician.  
**Ingestion:** Do not induce vomiting. If large amounts were swallowed, give water to drink and get medical attention.

### 5 - Firefighting Measures

**Extinguishing Media:** Water spray, dry chemical, alcohol foam, or carbon dioxide.  
**Unsuitable Extinguishing Media:** None known.

**Special Protective Equipment for Firefighters:** Self-contained breathing apparatus and protective clothing when fighting any chemical fire.

**Unusual Fire & Explosion Hazards:** 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

**Personal precautions:** 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.

**Environmental precautions:** 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.

**Methods for Containment/Cleaning Up:** 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

**Handling:** 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/protective clothing/eye protection/face protection

**Storage:** 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.  
Protect from frost. Store in cool dry places between 32°F (0°C) and 95°F (35°C).

**Special Packaging Requirements:** None known.

**Incompatible Materials or Fire/Explosion Protection:** 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 or full face shield.

**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

<b>Form and Appearance:</b>	Clear, colorless to pale yellow liquid	<b>Odor:</b>	Faint
<b>pH:</b>	~ 6.0 @ 5%	<b>Odor Threshold:</b>	N/D
<b>Boiling Point:</b>	> 302°F (150°C)	<b>Melting/Freezing point:</b>	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:	Soluble
Octanol/Water Partition Coefficient:	N/D	Specific Gravity/ Bulk Density:	~ 1.05
Auto-ignition temperature:	N/A	Decomposition Temperature:	N/D
Volatile content:	< 0.5%	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	>5000 mg/kg	-

#### Irritation and Corrosion

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

#### Sensitization

Target organ:	Species:	Results:	Comments:
Skin	Human	Not sensitizing	-

#### Specific Target Organ Toxicity – Single Exposure

Target organ:	Species:	Results:	Comments:
NDA			-

#### 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

Species:	Test type:	Exposure time:	Results:	Comments:
Leuciscus idus	LC50	96h	N/D	Expected to possess low toxicity to aquatic organisms.
Daphnia magna	EC50	48h	N/D	-
Algae	EC50	72h	N/D	-

### Environmental Fate

	NDA
<b>Persistence/Degradability:</b>	Product is moderately biodegradable.
<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

## 14 - Transport Regulations

### 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.

Marine Pollutant (Y/N): Not regulated.  
Other Information: 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	Yes (Polymer)	No	Yes	Yes	No	Yes	No	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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