

**1 - Product and Company Identification**

**Product name:** Mulsifan 400 DS

**Product type/usage/industry:** Polyethylene Glycol 400 Distearate

**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:**

P262: Do not get in eyes, on skin, or on clothing.  
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**

<u>CAS Number</u>	<u>Material or component</u>	<u>Avg % weight</u>
9005-08-7	Poly(oxy-1,2-ethanediyl), $\alpha$ -(1-oxooctadecyl)- $\omega$ -((1-oxooctadecyl)oxy)-(Z,Z)-	~ 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 mechanically (e.g. shovel). Dispose of absorbed material in accordance with local, state, and federal regulations.

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

<b>Handling:</b>	P261: Avoid breathing dusts/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.
<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**

<b>Form and Appearance:</b>	White to off-white solid	<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>	~97°F (36.1°C)
<b>Vapor Pressure:</b>	< 0.01 mmHg @ 20°C	<b>Vapor Density (Air=1):</b>	N/D
<b>Flash Point:</b>	> 302°F (150°C) (COC)	<b>Evaporation Rate:</b>	< 0.01
<b>UEL:</b>	N/A	<b>LEL:</b>	N/A
<b>Viscosity:</b>	N/D	<b>Solubility in Water:</b>	Dispersible
<b>Octanol/Water Partition Coefficient:</b>	N/D	<b>Specific Gravity/ Bulk Density:</b>	~ 0.97 @ 65°C (lit.)
<b>Auto-ignition temperature:</b>	N/D	<b>Decomposition Temperature:</b>	N/D
<b>Volatile content:</b>	< 1.0%	<b>VOC Data:</b>	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	No effects known	-

**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**

<b>Species:</b>	<b>Test type:</b>	<b>Exposure time:</b>	<b>Results:</b>	<b>Comments:</b>
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**

<b>Persistence/Degradability:</b>	Product is moderately biodegradable.
<b>COD/BOD5:</b>	NDA
<b>Bioaccumulation Potential:</b>	No bioconcentration is expected.
<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.
<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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