

Product: OXIMULSION 9800 Review: 00 Date: January 24<sup>th</sup>, 2019

### 1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product: OXIMULSION 9800** 

Internal identification code: -

Relevant recommended uses: Industrial uses.

Company: OXITENO USA, LLC

Address: 9801 Bay Area Blvd

PASADENA, TX

77507

Phone number: (281) 909-7600

Fax: (630) 364-5120

Emergency Phone number: For Chemical Emergency - Spill, Leak, Fire, Exposure or Accident:

Call CHEMTREC Day or Night 800-424-9300 (Domestic North America)

International, Call +1 703-527-3887 (collect calls accepted).

## 2. HAZARDS IDENTIFICATION

Classification: Acute toxicity – Oral, Category 4

Skin corrosion/irritation, Category 1C

Serious eye damage/eye irritation, Category 1

Hazardous to the aquatic environment – acute, Category 2

## **Label Elements:**

Hazard Pictograms:



• Signal Word: DANGER

• Hazard Statements: H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H401 Toxic to aquatic life.

• Precautionary Statements: P260 Do not breathe dusts or mists.

P264 Wash thoroughly after handling.



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P270 Do no eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312 IS SWALLOWED: Call a POSION CENTER or doctor/physician if you feel unwell.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician.

P321 Specific treatment.

P330 Rinse mouth.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents / container in accordance with current legislation.

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS

**Product Type:** Substance.

**Synonyms:** Linear alkylbenzene sulfonic acid; alkyl aryl sulfonic acid; n-dodecylbenzenesulfonic acid; dodecylbenzenesulfonic acid; laurylbenzenesulfonic acid; laurylbenzenesulfonic acid; laurylbenzene sulfonate; DODECYLBENZENE SULFONIC ACID (INCI Name).

**CAS Number:** 27176-87-0.

Impurities which contribute to the classification of the substance: Sulfuric acid (CAS 7664-93-9): <= 1.5%.

### 4. FIRST-AID MEASURES

#### **Procedure in Case of:**

- **Ingestion:** Seek prompt medical attention. Do not induce vomiting. Vomiting should only be induced by medical personnel. If vomiting occurs, keep the head lower than chest to avoid aspiration into the lungs. Never give anything by mouth to an unconscious or convulsing person.
- Inhalation: Seek prompt medical attention. Remove victim to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
- Skin contact: Remove contaminated clothing and shoes. Wash affected areas with plenty of running water, preferably under a shower. Seek prompt medical attention.
- Eye contact: Immediately flush with plenty of running water for at least 15 minutes, keeping eyelids open. Remove contact lenses if easy to do. Seek prompt medical attention.

#### Most important symptoms/effects, acute and delayed:

Ingestion – Causes severe burns of the mouth, throat, and stomach. May cause nausea, vomiting and diarrhea.



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Inhalation – Corrosive to the respiratory tract. May cause irritation of the nose and throat, upper airway edema, considerable respiratory distress and labored breathing.

Skin - Causes severe skin burns. May cause redness and pain.

Eyes – Causes serious eye damage. May cause irreversible eye injury, including blurred vision, redness, pain and blindness.

**Information for doctor:** There is not known any specific antidote. Direct the treatment in accordance with the symptoms and clinical conditions of the patient.

### 5. FIRE-FIGHTING MEASURES

Extinguishing Media: In case of fire, use: foam, dry chemical powder and carbon dioxide (CO2).

**Specific Hazards:** Product is not flammable. In case of combustion may generate toxic and/or irritant fumes containing: oxides of sulfur, oxides of carbon, hydrogen sulfide (H2S).

**Protective measures for fire fighters:** Water jets should not be used directly on igniting products because it may disperse the material and intensify the fire. Self-contained breathing apparatus and protective clothing are required. Cool the intact fire-exposed containers with water spray and remove them.

### **NFPA Rating:**

• Health: 3

• Flammability: 1

• Instability: 0

• Special:

# 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Isolate and signalize area. Keep heat and/or ignition sources away. Use personal protection equipment as indicated in Section 8, in order to avoid contact with spilled product.

**Environmental Precautions:** Prevent product from entering into soil and waterways. Notify the competent authorities if the product has run into drainage systems or watercourse or has contaminated the ground or vegetation.

**Methods and materials for containment and cleaning up:** Stop if possible. Contain and dike spilled product with earth or sand. Eliminate ignition or heat sources. Transfer to proper container. Collect remnants with an appropriate absorbent material. Wash the contaminated surface with water, which should be collected for disposal.

### 7. HANDLING AND STORAGE

**Precautions for safe handling:** Use in a well-ventilated area. Avoid inhalation and contact with eyes, skin or clothing through proper protection. If occurs accidental contact, exposed area should be washed immediately. Emergency eyewashes and showers shall be located in accessible locations. Wash hands and face thoroughly after handling. Wash contaminated clothing before reuse.

**Conditions for safe storage:** Store in a covered and well-ventilated area, away from sunlight and sources of heat or open flames. Ensure that the storage location has adequate moisture, pressure and temperature. Keep containers tightly closed when not in use.



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**Incompatibilities:** Avoid contact with alkalis, water, strong oxidizing agents, strong reducing agents, alkaline metals, cyanides, sulfides.

Packaging Material: Recommended: High density polyethylene, stainless steel, iron.

### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

## **Control parameters:**

• TLV-TWA (ACGIH): Sulfuric acid: 0.2 mg/m³.

T - Measured as thoracic fraction of the aerosol.

• PEL-TWA (OSHA): Sulfuric acid: 1 mg/m<sup>3</sup>.

• TLV-STEL (ACGIH): Not established.

• LT(NR15): Not established.

• Odor Threshold: Sulfuric acid: 0.15 ppm.

• IDLH: Sulfuric acid: 15 mg/m<sup>3</sup>.

• Biological Exposure Indices (ACGIH): Not established.

**Engineering Control Measures:** In closed environments, this product should be handled keeping proper exhaust (general diluter or local exhauster).

#### **Individual Protection Measures:**

- Eye Protection: Side shields or wide vision safety goggles.
- Skin Protection: PVC apron. It is recommended to adopt safety boots/shoes.
- Hand protection: Gloves made of: PVC (Polyvinyl chloride), Nitrile rubber.
- Breathing equipment: In case of emergency or contact with high concentrations of the product, wear an air supplied mask or self-contained breathing apparatus. It is recommended to wear face mask with organic vapors cartridge in case of exposure to vapors/aerosols.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown liquid.

Odour and Odour threshold: Characteristic odor.

pH: 2.0 (1% w/w solution).

Melting point/Freezing point: Not available.

Initial Boiling Point and Boiling Range: Not available.

Flash point: > 100 °C (closed cup).



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**Evaporation rate:** Not available.

Flammability (solid, gas): Not applicable.

Upper/lower flammability or explosive limits: Not available.

Vapour pressure: Not available.

Vapour density (air = 1): Not available.

Relative density (water=1): ca. 1.1 g/cm<sup>3</sup> (20 °C).

Apparent density: Not applicable.

**Solubility:** Soluble in water.

Partition Coefficient n-octanol/water: Log Kow: 4.78.

Auto-ignition temperature: Not available.

**Decomposition temperature:** Not available.

Viscosity: > 200 mm<sup>2</sup>/s @40 °C.

## 10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions of use and storage.

Reactivity: There is a possibility of dangerous reactivity.

Possibility of Hazardous Reactions: May react exothermically with water, causing violent liberation of heat.

Conditions to avoid: High temperatures, ignition sources and prolonged exposure to the air.

**Incompatible materials:** Avoid contact with: Alkalis, water, strong oxidizing agents, strong reducing agents, alkaline metals, cyanides, sulfides.

**Hazardous decomposition products:** In case of combustion may generate toxic and/or irritant fumes containing: Oxides of sulfur, oxides of carbon, hydrogen sulfide (H2S).

Considerations on the use of the product: Not applicable.

## 11.TOXICOLOGICAL INFORMATION

# **Acute Toxicity:**

• Oral: LD50, rat: 650 mg/kg; 500 - 2000 mg/kg.

• Inhalation: Not available.

• Dermal: Not available.



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**Skin corrosion/irritation:** Severe irritant (0.5 mL/4h, rabbit).

Serious eye damage/eye irritation: Causes corneal opacity not reversed at 72 hours (alkylbenzene sulfonates).

**Respiratory or skin sensitization:** There is one positive result in the maximization test employing guinea pig. However, it is judged as not sensitizing to humans based on five negative results in others tests.

**Germ cell mutagenicity:** Negative in a bacterial reverse mutation assay and in chromosome aberration test using Chinese hamster lung cells (CHL) both with and without metabolic activation.

Carcinogenicity: No data are available, but carcinogenicity studies indicate that alkylbenzene sulfonates do not cause an increase in tumor incidence.

**Reproductive toxicity:** No treatment-related changes were observed in the copulation, fertility and pregnancy indices, gestation length, the number of corpora lutea and implantation, delivery index. Also no treatment-related changes were observed in all parameters of offspring's during the parturition and lactation periods. Based on these effects, the NOAEL in rats for fertility and developmental toxicity was 400mg/kg bw/day, the highest dose tested.

Specific target organ toxicity - Single exposure: Not available.

**Specific target organ toxicity - Repeated exposure:** Oral administration of dodecylbenzenesulfonic acid to rats resulted in soft feces, and squamous cell hyperplasia of stomach in both sexes, and liquid feces, a forestomach erosion/ulcer, a decrease in body weight and food consumption in males. Based on these effects the NOAEL value was 100 mg/kg bw/day and the LOAEL value was 200 mg/kg bw/day both for male and female rats.

**Aspiration hazard:** Not expected to be an aspiration hazard.

### 12.ECOLOGICAL INFORMATION

## **Ecotoxicity:**

Fish -

LC50, 96h, Oncorhynchus mykiss: 10.8 mg/L [static].

LC50, 96h, Brachydanio rerio: 3.5 - 10 mg/L [static].

LC50, 96h, Leuciscus idus: 4.1 mg/L [static].

Algae -

EC50, 96h, Pseudokirchneriella subcapitata: 29 mg/L [growth rate].

Invertebrate -

EC50, 48h, Daphnia magna: 5.88 mg/L [immobilization].

Persistence and Degradability: > 96% @20 °C (ISO 9408 standard). Readily biodegradable.

**Bioaccumulative Potential:** Log Kow: 4.78. It is not expected to bioaccumulate in the environment.

**Mobility in soil:** Log Koc: 3.53. It is expected to have low mobility in soil.

Other Adverse Effects: Water hazard class 2: Hazard to water.

### 13.DISPOSAL CONSIDERATIONS

#### Recommended methods of disposal:



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• **Product:** The preferred options for disposal include reuse, recycling, co-processing, finding a use for a by-product incineration or other thermal destruction process at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. Perform co-processing, incineration or other thermal destruction process at facilities capable of minimizing or reducing air pollution emissions.

The disposal must comply with federal, state, and local laws and regulations in accordance with the environmental agencies.

- Product Remains: Same method as indicated for product.
- Packaging: Do not cut or pierce the packaging, nor do hot work near them. Do not remove labels until the product has been fully removed and the packaging cleaned. The preferred options for disposal include reuse, recycling or reclamation at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. The disposal must comply with local legislation and in accordance with standards from local environmental agencies.

#### 14.TRANSPORT INFORMATION

#### **Land Transport ANTT:**

• UN number: 2586

• Proper Shipping Name: ALKYLSULPHONIC ACIDS, LIQUID, with not more than 5% free sulphuric acid

Hazard Class: 8Hazard Number: 80Packaging Group: III

#### **Maritime Transport IMDG:**

• UN number: 2586

• Proper Shipping Name: ALKYLSULPHONIC ACIDS, LIQUID, with not more than 5% free sulphuric acid

• IMDG Class: 8 • Packaging Group: III • EmS: F-A, S-B

#### Air Transport ICAO-TI and IATA-DGR:

• UN number: 2586

• Proper Shipping Name: ALKYLSULPHONIC ACIDS, LIQUID, with not more than 5% free sulphuric acid

• ICAO/IATA Class: 8
• Label: Corrosive.
• Packaging Group: III

### **Land Transportation U.S DOT:**

Packaging Type: Bulk and Non-bulk

• Proper Shipping Name: ALKYLSULPHONIC ACIDS, LIQUID, with not more than 5% free sulphuric acid

• Hazard Class or Division: 8

ID Number: UN2586
Packaging Group: III
Remarks: Not applicable.

### 15. REGULATORY INFORMATION

### **Applicable Standards:**



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Resolution 5232/2016 - Transport Ministry.

IMDG Code - 2016 Edition - IMO (International Maritime Organization).

Dangerous Goods Regulations – 57th Edition - IATA (International Air Transport Association).

U.S.A Department of Transportation – DOT – 49 CFR 172.101.

OSHA - Occupational Safety & Health Administration – U.S. Department of Labor Equistar Chemical, LP, Houston TX (EUA).

**OSHA Hazard Communication Standard:** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### SARA Title III - Sections 311 / 312 (40 CFR 370 Subparts B and C):

Immediate (Acute) Health Hazard: Yes. Delayed (Chronic) Health Hazard: No.

Fire Hazard: No.

Sudden Release of Pressure Hazard: No.

Reactive Hazard: No.

**SARA Title III - Section 313 (40 CFR 372.65):** This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

SARA Title III - Section 302 (40 CFR 355 Appendix A): Sulfuric acid (CAS 7664-93-9): máx. 1.5%. TPQ: 1000 lbs.

### CERCLA (40 CFR 302.4) / SARA 304

Dodecylbenzenesulfonic acid (CAS 27176-87-0): min. 90%. RQ: 1000 lbs.

Sulfuric acid (CAS 7664-93-9): máx. 1.5%. RQ: 1000 lbs.

Reportable Quantity (RQ) of this product is 1000 pounds based upon Dodecylbenzenesulfonic acid which yielded the lowest resultant RQ according to the following formula: CERCLA ingredient RQ/% of that ingredient in the product.

### **New Jersey Hazardous Substance List**

Dodecylbenzenesulfonic acid (CAS 27176-87-0): Substance# 0822 (Special Health Hazard Code: CO – Corrosive). Sulfuric acid (CAS 7664-93-9): Substance# 1761 (Special Health Hazard Code: CA – Carcinogen; CO – Corrosive; R2 – Reactive 2nd degree).

### California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act)

This product does not contain a chemical which is listed in California Proposition 65.

## **Pennsylvania Hazardous Substance List**

Dodecylbenzenesulfonic acid (CAS 27176-87-0) and Sulfuric acid (CAS 7664-93-9): Listed also as an environmental hazard substance.

### **Inventory Status**

United States & Puerto Rico - Toxic Substances Control Act (TSCA) Inventory: Yes

Canada - Domestic Substances List (DSL): Yes

Canada - Non-Domestic Substances List (NDSL): No

Europe - European Inventory of Existing Commercial Chemical Substances (EINECS): Yes

Europe - European List of Notified Chemical Substances (ELINCS): No

Australia – Australian Inventory of Chemical Substances (AICS): Yes

Philippines - Philippine Inventory of Chemicals and Chemical Substances (PICCS): Yes

Japan – Inventory of Existing and New Chemical Substances (ENCS): Yes

Korea - Existing Chemicals List (ECL): Yes

China - Inventory of Existing Chemical Substances in China (IECSC): Yes

New Zealand – New Zealand Inventory: Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).



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### **16.OTHER INFORMATION**

Remarks: Not available.

#### Sources:

2016 TLVs and BEIs – Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices – ACGIH.

2016 Guide to Occupational Exposure Values - ACGIH.

eChemPortal - The Global Portal to Information on Chemical Substances.

LOLI - ChemADVISOR's Regulatory Database.

ExPub - Expert Publishing Database.

#### **Abbreviations and acronyms:**

ACGIH: American Conference of Governmental Industrial Hygienists (USA).

ADR: European agreement concerning the international carriage of dangerous goods by road.

CAS: Chemical Abstracts Service (American Chemical Society - EUA).

EC50: Average concentration for 50% of maximum response.

LC: Lethal Concentration - substance concentration in the environment that leads to death after a certain period of exposure.

LC50: Lethal concentration for 50% of the test animals.

BOD: Biochemical Oxygen Demand.

LD50: Lethal Dose for 50% of the test animals.

LDLo: Lethal Dose Low - minimal amount of a chemical lethal to animals in testing.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IARC: International Agency for Research on Cancer.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods by Regulations by the IATA

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the ICAO.

IMDG: International Maritime Code for Dangerous Goods.

IDLH - Immediately Dangerous To Life or Health Concentrations.

Kow: Octanol/water partition coefficient.

LT (NR 15): Exposure limits of the standard number 15 - Unhealthy Operations and Activities from the

Ministry of Labour and Employment of Brazil.

LOAEL: Lowest Adverse Effect Level

LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database

NLP: No Longer Polymers.

NIOSH: National Institute for Occupational Safety and Health.

NOAEL: No Observed Adverse Effect Level

NTP: National Toxicology Program.

OSHA: Occupational Safety and Health Administration (EUA).

PEL-TWA: Exposure Limit Allowed – time-weighted average.

RID: Regulations concerning the international transport of dangerous goods by rail.

TLV-STEL: Tolerance Limit - short period of time (15 minutes, maximum).

TLV-TWA: Tolerance Limit – time weighted average.

WGK: Wassergefährdungsklasse (Germany) - Water Hazard Class.

This Safety Data Sheet was authoring according to our current knowledge and experience, however cannot imply guarantee of any nature. Considering the variety of factors that can affect their process or application, the information on this sheet does not exempt the processors from the responsibility of executing their own tests and experiments.