


SAFETY DATA SHEET		
<b>SULFURIC ACID OLEUM 29.5%</b>		
Revision: 2. US ( EN )	Issuing date: 05/09/2016	

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

Trade name : SULFURIC ACID OLEUM 29.5%

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

no data available

**1.3 Details of the supplier of the safety data sheet**

Company : Eco Services Operations Corp.  
 2002 Timberloch Place  
 Suite 300  
 The Woodlands, TX 77380  
 Phone number : (844) 812-1812

**1.4 Emergency telephone**

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC 800-424-9300 within the United States and Canada, or 703-527-3887 for international collect calls.

**SECTION 2: Hazards identification**

Although OSHA has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects.

**2.1 Classification of the substance or mixture**

**HCS 2012 (29 CFR 1910.1200)**

Skin corrosion, Category 1A  
 Serious eye damage, Category 1  
 Specific target organ systemic toxicity - single exposure, Category 3, Respiratory system

H314: Causes severe skin burns and eye damage.  
 H318: Causes serious eye damage.  
 H335: May cause respiratory irritation.

**2.2 Label elements**

**HCS 2012 (29 CFR 1910.1200)**

Pictogram



Signal Word

: Danger

**Hazard Statements:**

H314 Causes severe skin burns and eye damage.  
 H335 May cause respiratory irritation.

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**Precautionary Statements:**

## Prevention

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
 P264 Wash skin thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

## Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.  
 P363 Wash contaminated clothing before reuse.

## Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up.

## Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.

**2.3 Other hazards which do not result in classification**

## Water Reactive


H402: Harmful to aquatic life.  
 H411: Toxic to aquatic life with long lasting effects.

**SECTION 3: Composition/information on ingredients****3.1 Substance**

Not applicable, this product is a mixture.

**3.2 Mixture****Hazardous Ingredients and Impurities**

Chemical Name	Identification number CAS-No.	Concentration [%]
Sulfuric acid	7664-93-9	70.5
Sulfur trioxide	7446-11-9	29.5

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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

- If inhaled : Remove victim from exposure and then have him lie down in the recovery position.  
Keep warm and in a quiet place.  
In case of shortness of breath, give oxygen.  
If breathing has stopped, apply artificial respiration.  
Immediate medical attention is required.
- Skin contact : In case of contact, immediately flush skin with plenty of water for at least 30 minutes.  
Remove all contaminated apparel under the shower.  
Wash off with plenty of water.  
Do not attempt to neutralize with chemical agents  
Immediate medical attention is required.
- Eye contact : In case of contact, immediately flush eyes with plenty of water for at least 30 minutes.  
Obtain medical attention.  
Oils or ointments should not be applied unless directed by physician  
If eye irritation persists, consult a specialist.
- Ingestion : Do NOT induce vomiting.  
If victim is fully conscious, give a cupful of water.  
Lay victim on side.  
Risk of product entering the lungs on vomiting after ingestion.  
Do not leave the victim unattended.  
Never give anything by mouth to an unconscious person.  
Immediate medical attention is required.

### 4.2 Most important symptoms and effects, both acute and delayed

- Risks : Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis  
Skin contact may aggravate existing skin disease

### 4.3 Indication of any immediate medical attention and special treatment needed


- Notes to physician : All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

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## SECTION 5: Firefighting measures

- Flash point : Not applicable
- Autoignition temperature : no data available
- Flammability / Explosive limit : no data available

### 5.1 Extinguishing media

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Suitable extinguishing media : Extinguishing media - small fires  
 Dry chemical  
 Carbon dioxide (CO2)  
 Extinguishing media - large fires  
 Dry sand  
 Water spray

Unsuitable extinguishing media : Water

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during fire fighting : Not combustible.  
 Strong oxidizer. Contact with other material may cause fire.  
 Reacts violently with water.  
 Corrosive or suffocating vapors are released.  
 Risk of explosion.  
 Fire will produce dense black smoke containing hazardous combustion products (see section 10).  
 On combustion or on thermal decomposition (pyrolysis), releases:  
 Sulfur oxides  
 Sulfuric acid reacts with metals, especially when diluted with water. This reaction produces highly flammable hydrogen gas, which may explode when ignited, especially in confined spaces.

**5.3 Advice for firefighters**

Special protective equipment for fire-fighters : Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Specific fire fighting methods : Fight fire remotely due to the risk of explosion.


**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions, protective equipment and emergency procedures : The product must only be handled by specifically trained employees.

**6.2 Environmental precautions**

Environmental precautions : Do not flush into surface water or sanitary sewer system.  
 Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
 Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies  
 Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.

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### **6.3 Methods and materials for containment and cleaning up**

- Recovery : Stop leak if safe to do so.  
Dam up with sand or inert earth (do not use combustible materials).
- Decontamination / cleaning : Pump or collect any free spillage into an appropriate closed container. (see Section 7: Handling and Storage)  
Exercise caution during neutralization as considerable heat may be generated  
Carefully neutralize the remainder using:  
soda ash  
Sodium bicarbonate  
lime

### **6.4 Reference to other sections**

- Reference to other sections : 7. HANDLING AND STORAGE

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

- Technical measures : Do not breathe mist or vapors.  
Do not get in eyes or mouth or on skin.  
Reacts violently with:  
bases.  
When diluting, always add the product to water. Never add water to the product.
- Hygiene measures : Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:  
1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.  
2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.  
3) Wash exposed skin promptly to remove accidental splashes or contact with material.


### **7.2 Conditions for safe storage, including any incompatibilities**

#### **Storage conditions**

- Recommended : Keep tightly closed.  
Store in an area:  
dry  
well-ventilated

#### **Storage stability**

- Storage temperature : < 104 °F (< 40 °C)
- Other data : Corrosion rates increase at elevated temperatures.

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**7.3 Specific end use(s)**

no data available

**SECTION 8: Exposure controls/personal protection**

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

**8.1 Control parameters**

**Ingredients with workplace control parameters**

Ingredients	Value type	Value	Basis
Sulfuric acid	TWA	1 mg/m3	NIOSH
Sulfuric acid	TWA	0.2 mg/m3	ACGIH
Form of exposure : Thoracic fraction Pulmonary function, Classification refers to sulfuric acid contained in strong inorganic acid mists, Suspected human carcinogen			
Sulfuric acid	TWA	1 mg/m3	OSHA Z-1
Sulfuric acid	TWA	1 mg/m3	OSHA Z-1-A
Sulfuric acid	TWA	0.2 mg/m3	SOLVAY

**NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations)**

Ingredients	CAS-No.	Concentration
Sulfuric acid	7664-93-9	15 milligram per cubic meter

**8.2 Exposure controls**

**Control measures**

Engineering measures : Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures :

Effective exhaust ventilation system

**Personal protective equipment**

Respiratory protection : When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Recommended Filter type: Acidic gas/vapor type

Eye protection : Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended

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for this material.

Eye contact should be prevented through the use of:

Wear protective eye glasses for protection against liquid splashes (goggles)

Skin and body protection

: Wear as appropriate:  
Face-shield  
Acid-resistant protective clothing  
Acid resistant boots.

Hygiene measures

: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:  
1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.  
2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.  
3) Wash exposed skin promptly to remove accidental splashes or contact with material.

Protective measures

: Ensure that eyewash stations and safety showers are close to the workstation location.

**SECTION 9: Physical and chemical properties**

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

**9.1 Information on basic physical and chemical properties**

Appearance	: Form : fuming Physical state: liquid Color: cloudy
Odor	: irritating
Odor Threshold	: no data available
pH	: < 1.0 ( 1 % (m/v))
Freezing point	: 68 - 73 °F (20 - 23 °C)
Boiling point/boiling range	: 266 - 284 °F (130 - 140 °C) ( 760 mmHg (1,013.25 hPa))
Flash point	: Not applicable
Evaporation rate (Butylacetate = 1)	: 0.56
Flammability (solid, gas)	: no data available
Flammability (liquids)	: no data available

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Flammability / Explosive limit	:	no data available
Autoignition temperature	:	no data available
Vapor pressure	:	3 - 4.5 mmHg (4.00 - 6.00 hPa) ( 68 °F (20 °C))
Vapor density	:	no data available
Density	:	Relative density : 1.95 ( 39 °F (4 °C))
Solubility	:	<u>Water solubility</u> : miscible
Partition coefficient: n-octanol/water	:	no data available
Thermal decomposition	:	no data available
Viscosity	:	no data available
Explosive properties	:	no data available
Oxidizing properties	:	no data available

**9.2 Other information**

Reactions with water / air : Reacts violently with water.

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**SECTION 10: Stability and reactivity****10.1 Reactivity**

no data available

**10.2 Chemical stability**

Chemical stability : Stable

**10.3 Possibility of hazardous reactions**

Contact with metals may evolve flammable hydrogen gas, especially in confined spaces.  
Hazardous polymerization does not occur.

**10.4 Conditions to avoid**

no data available



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**10.5 Incompatible materials**

Materials to avoid : Water  
 Strong reducing agents  
 Halogenated compounds  
 Bases  
 metals  
 Nitrogen oxides (NOx)

**10.6 Hazardous decomposition products**

Decomposition products : Sulfur oxides

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

Acute oral toxicity  
 Sulfuric acid

LD50 Oral : 2,140 mg/kg - Rat  
 Gavage  
 Published data

Acute inhalation toxicity  
 Sulfuric acid

: LC50 - 4 h ( aerosol ) : 0.375 mg/l - Rat , male and female  
 Toxicity secondary to corrosive effects at site of contact.  
 Published data

LC50 - 4 h ( aerosol ) : 0.85 mg/l - Mouse , male and female  
 Toxicity secondary to corrosive effects at site of contact.  
 Published data

( Mist ) Humans

Symptoms: Potential health effects, Respiratory disorders, Symptoms may be delayed., Cough, Risk of delayed pulmonary edema.

Effects of breathing high concentration of respirable particles may include:

May cause irritation of respiratory tract.

Lung irritation

Published data

Acute dermal toxicity  
 Sulfuric acid

: Not classified as hazardous for acute toxicity according to GHS  
 Not applicable  
 Corrosive  
 internal evaluation

Acute toxicity (other routes of administration) : no data available

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**Skin corrosion/irritation**

Skin irritation

Sulfuric acid : Causes severe burns.  
Published data

**Serious eye damage/eye irritation**

Eye irritation

Sulfuric acid : Risk of serious damage to eyes.  
Published data

**Respiratory or skin sensitization**

Sensitization

Sulfuric acid : Local lymph node assay  
Not applicable  
Corrosive  
The product is not considered to be sensitizing by skin contact.  
internal evaluation

**Mutagenicity**

Genotoxicity in vitro


Sulfuric acid : Mutagenicity (Salmonella typhimurium - reverse mutation assay)  
with and without metabolic activation  
negative  
Method: OECD Test Guideline 471  
Published data

Chromosome aberration test in vitro  
Strain: Chinese hamster ovary cells  
with and without metabolic activation  
positive  
Effects observed are due to the reduced pH in the test medium.  
Published data

Product is not considered to be genotoxic

Genotoxicity in vivo

: no data available

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**Carcinogenicity**

Carcinogenicity  
Sulfuric acid

: inhalation (mist)

Animal studies  
Unpublished reports  
Published data  
No carcinogenic effects have been observed

Note: IARC Classification: Group 1  
mists from strong inorganic acids

IARC and NTP classified "occupational exposure to strong inorganic acid mists containing sulfuric acid" as a known human carcinogen. ACGIH has also classified "sulfuric acid as contained in strong inorganic acid mists" as a suspected human carcinogen. There is still a debate on the studies reviewed by these agencies. We disagree with IARC's conclusion, in that more recent studies have failed to find association between "occupational exposure to strong inorganic acid mist containing sulfuric acid." and laryngeal or lung cancer. In fact, in 2012 IARC revised their classification dropping the "containing sulfuric acid" wording. Lifetime animal studies in hamsters, rats, and guinea pigs were conducted by the EPA and NIEHS and were all negative. However, they were not formally published by the agencies and not considered by IARC or NTP.

Ingredients	CAS-No.	Rating	Basis
Strong inorganic acid mists containing sulfuric acid		Group 1: Carcinogenic to humans	IARC
Strong inorganic acid mists containing sulfuric acid		Suspected human carcinogen	ACGIH
Strong inorganic acid mists containing sulfuric acid		Known to be human carcinogen	NTP
Sulfur trioxide	7446-11-9	Known to be human carcinogen	NTP
Sulfuric acid	7664-93-9	Suspected human carcinogen	ACGIH

This product does not contain any ingredient designated as probable or suspected human carcinogens by:

OSHA  
IARC

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**Toxicity for reproduction and development**
**Toxicity to reproduction / fertility**

Sulfuric acid : Effects on fertility  
fetotoxic effect  
no observed effect

**Developmental Toxicity/Teratogenicity**

Sulfuric acid : Rabbit  
Application Route: inhalation (mist)  
NOAEC teratogenicity: 19.3 mg/m<sup>3</sup>  
  
Method: OECD Test Guideline 414  
no teratogenic effects have been observed  
  
Mouse  
Application Route: inhalation (mist)  
NOAEC teratogenicity: 19.3 mg/m<sup>3</sup>  
  
Method: OECD Test Guideline 414  
no teratogenic effects have been observed  
Published data

**STOT**
**STOT-single exposure**

Sulfuric acid Routes of exposure: inhalation (mist)  
Target Organs: Respiratory Tract  
Toxicology Assessment:  
May cause respiratory irritation.

**STOT-repeated exposure**

Sulfuric acid : Toxicology Assessment:  
The substance or mixture is not classified as specific target organ toxicant,  
repeated exposure., internal evaluation

Sulfuric acid : inhalation (mist) 28 d - Rat  
LOAEC: 0.3 mg/m<sup>3</sup>  
Target Organs: Larynx  
Method: OECD Test Guideline 412  
Symptoms: Local irritation  
Unpublished reports  
  
inhalation (mist) 78 Weeks - Monkey  
LOAEC: 0.38 mg/m<sup>3</sup>  
Target Organs: Respiratory Tract  
Symptoms: Local irritation, Respiratory disorders  
Published data

Repeated inhalation of aerosols may cause adverse effects on health

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**Experience with human exposure**

Experience with human exposure : Inhalation

Sulfuric acid : Target Organs: Respiratory Tract

Target Organs: Nose

Symptoms: Burning sensations in the nose and throat.

Breathing difficulties

Dental erosion

Mist

At high concentrations:

Irritating to the respiratory system and mucous membranes.

Published data

Carcinogenicity

Sulfuric acid

: Carcinogenicity classification not possible from current data.

Teratogenicity

Sulfuric acid

: Did not show teratogenic effects in animal experiments.

**Aspiration toxicity**

Aspiration toxicity

Sulfuric acid

: Not applicable

**SECTION 12: Ecological information****12.1 Toxicity****Aquatic Compartment**

Acute toxicity to fish

Sulfuric acid

: LC50 - 96 h : 16 - 28 mg/l - Lepomis macrochirus (Bluegill sunfish)  
static test

Non neutralized product

pH 3.5 - 3.25

Harmful to fish.

Published data

Acute toxicity to daphnia and other aquatic invertebrates.

Sulfuric acid

: EC50 - 48 h : > 100 mg/l - Daphnia magna (Water flea)  
static test Method: OECD Test Guideline 202

Fresh water

Neutralized product

Not harmful to aquatic invertebrates. (EC50 &gt; 100 mg/L)

Unpublished reports

EC50 - 24 h : 29 mg/l - Daphnia magna (Water flea)

Method: ISO 6341

Non neutralized product

Harmful to aquatic invertebrates.

Published data

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## Toxicity to aquatic plants

Sulfuric acid

: NOEC : 0.13 mg/l - Algae  
field study  
pH 5.6  
Non neutralized product  
Published data

ErC50 - 72 h : > 100 mg/l - Desmodesmus subspicatus (green algae)  
Growth inhibition  
Method: OECD Test Guideline 201  
Neutralized product  
Unpublished reports

## Chronic toxicity to fish

Sulfuric acid

: NOEC: 0.13 mg/l - 10 Months - Salvelinus fontinalis (brown trout)  
flow-through test  
pH 5.6  
Fresh water  
Non neutralized product  
Published data

**Ecotoxicity assessment**

## Acute aquatic toxicity

Sulfuric acid

: If the product is not neutralized, it may cause adverse effects to aquatic organisms due to its acidity.  
Neutralization will reduce ecotoxic effects.

## Chronic aquatic toxicity

Sulfuric acid

: If the product is not neutralized, it may cause adverse effects to aquatic organisms due to its acidity.

**12.2 Persistence and degradability****Biodegradability**

## Biodegradability

Sulfuric acid

: Not applicable, inorganic substance

**Stability**

## Stability in water

Sulfuric acid

: Product dissociates rapidly to corresponding ions on contact with water.

**12.3 Bioaccumulative potential**

## Partition coefficient: n-octanol/water

Sulfuric acid

: Not applicable, inorganic substance


## Bioconcentration factor (BCF)

Sulfuric acid

: Not relevant  
internal evaluation

**12.4 Mobility in soil**

no data available

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**12.5 Results of PBT and vPvB assessment**

Results of PBT and vPvB assessment

Sulfuric acid : This substance is not considered to be persistent, bioaccumulating, and toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**12.6 Other adverse effects**

Environment assessment

Sulfuric acid : Not classified as Dangerous for the Environment

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product Disposal**

Advice on Disposal : Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Waste Code : EPA:  
Hazardous Waste – YES  
  
RCRA:  
D002 - Corrosive waste – (C)  
D003 - Reactive waste – (R)

**SECTION 14: Transport information**

Transportation status: IMPORTANT! Statements below provide additional data on listed transport classification.

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

**DOT**

**14.1 UN number** UN 1831

**14.2 Dangerous Good Description** UN 1831 SULFURIC ACID, FUMING, 8, I

**14.3 Transport hazard class** 8

**14.4 Packing group**


Packing group I

Label(s) 8

ERG No 137

**14.5 Environmental hazards** NO

**Marine pollutant**

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**14.6 Special precautions for user**

This product contains one or more ingredients identified as a hazardous substance in Appendix A of 49 CFR 172.101. The product quantity, in one package, which triggers the RQ requirements under 49 CFR for each hazardous substance is shown.

Reportable quantities : RQ substance: Sulfuric acid  
RQ limit for substance: 1,000 lb  
RQ limit for product: 935 lb

**TDG**

**14.1 UN number** UN 1831

**14.2 Dangerous Good Description** UN 1831 SULFURIC ACID, FUMING, 8 (6.1), I

**14.3 Transport hazard class** 8  
Subsidiary hazard class 6.1

**14.4 Packing group**  
Packing group I  
Label(s) 8 (6.1)  
ERG No 137

**14.5 Environmental hazards** NO  
**Marine pollutant**

**IMDG**

**14.1 UN number** UN 1831

**14.2 Dangerous Good Description** UN 1831 SULPHURIC ACID, FUMING, 8 (6.1), I

**14.3 Transport hazard class** 8  
Subsidiary hazard class 6.1

**14.4 Packing group**  
Packing group I  
Label(s) 8 (6.1)  
EmS F-A , S-B

**14.5 Environmental hazards** NO  
**Marine pollutant**


**14.6 Special precautions for user**  
For personal protection see section 8.

**IATA**

**14.1 UN number** UN 1831

**14.2 Dangerous Good Description** Not permitted for transport



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**14.3 Transport hazard class** Not permitted for transport

**14.4 Packing group**  
Packing instruction (cargo aircraft) Not permitted for transport  
Packing instruction (passenger aircraft) Not permitted for transport

**14.5 Environmental hazards** NO  
**Marine pollutant**

**14.6 Special precautions for user**  
For personal protection see section 8.


Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

**SECTION 15: Regulatory information**

**15.1 Notification status**

- United States TSCA Inventory : YES (positive listing)  
On TSCA Inventory
- Canadian Domestic Substances List (DSL) : YES (positive listing)  
All components of this product are on the Canadian DSL.
- Australia Inventory of Chemical Substances (AICS) : YES (positive listing)  
On the inventory, or in compliance with the inventory
- Japan. CSCL - Inventory of Existing and New Chemical Substances : YES (positive listing)  
On the inventory, or in compliance with the inventory
- Korea. Korean Existing Chemicals Inventory (KECI) : YES (positive listing)  
On the inventory, or in compliance with the inventory
- China. Inventory of Existing Chemical Substances in China (IECSC) : YES (positive listing)  
On the inventory, or in compliance with the inventory

**15.2 Federal Regulations**

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**SARA 311/312 Hazards**

Fire Hazard	no
Reactivity Hazard	yes
Sudden Release of Pressure Hazard	no
Acute Health Hazard	yes
Chronic Health Hazard	no

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:  
Sulfuric acid 7664-93-9 70.5 %

**SARA 302** : The following components are subject to reporting levels established by SARA Title III, Section 302:

Ingredients	CAS-No.	Threshold planning quantity	Remarks
Sulfuric acid	7664-93-9	1000 lb	
Sulfur trioxide	7446-11-9	100 lb	Form: Reactive solid

**EPCRA - Emergency Planning and Community Right-to-Know**

**CERCLA Reportable Quantity**

Ingredients	CAS-No.	Reportable quantity
Unlisted hazardous wastes - Characteristic of Corrosivity		100 lb
Unlisted hazardous wastes - Characteristic of Reactivity		100 lb
Sulfuric acid	7664-93-9	1000 lb

**SARA 304 Reportable Quantity**

Ingredients	CAS-No.	Reportable quantity
Sulfur trioxide	7446-11-9	100 lb
Sulfuric acid	7664-93-9	1000 lb

**SARA 302 Reportable Quantity**


Ingredients	CAS-No.	Reportable quantity
Sulfur trioxide	7446-11-9	100 lb
Sulfuric acid	7664-93-9	1000 lb

**15.3 State Regulations**

**California Prop 65** : WARNING! This product contains a chemical known in the State of California to cause cancer.  
Strong inorganic acid mists containing sulfuric acid

WARNING! This product contains a chemical known in the State of California to cause cancer.  
Sulfur trioxide

**SECTION 16: Other information**

SAFETY DATA SHEET		
<b>SULFURIC ACID OLEUM 29.5%</b>		
Revision: 2. US ( EN )	Issuing date: 05/09/2016	

**NFPA (National Fire Protection Association) - Classification**

Health : 3 serious  
 Flammability : 0 minimal  
 Instability or Reactivity : 2 moderate

**HMIS (Hazardous Materials Identification System (Paint & Coating)) - Classification**

Health : 3 serious  
 Flammability : 0 minimal  
 Reactivity : 2 moderate

**Further information**

Date Prepared : 01/20/2015  
 Further information : Product classified under the US GHS format.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

TWA : 8-hour, time-weighted average  
 ACGIH : American Conference of Governmental Industrial Hygienists  
 OSHA : Occupational Safety and Health Administration  
 WHMIS : Workplace Hazardous Materials Information System  
 NTP : National Toxicology Program  
 IARC : International Agency for Research on Cancer  
 : Solvay Acceptable Exposure Limit  
 NIOSH : National Institute for Occupational Safety and Health  
 NFPA : National Fire Protection Association  
 HMIS : Hazardous Materials Identification System (Paint & Coating)

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in another manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.