

SAFETY DATA SHEET		
SULFURIC ACID 78%		
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 78%

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	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Specific target organ systemic toxicity - single exposure, Category 3, Respiratory system	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.

SAFETY DATA SHEET		
SULFURIC ACID 78%		
Revision: 2. US (EN)	Issuing date: 05/09/2016	

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	78

Non Hazardous Ingredients and Impurities

Chemical Name	Identification number CAS-No.	Concentration [%]
Water	7732-18-5	22

SAFETY DATA SHEET		
SULFURIC ACID 78%		
Revision: 2. US (EN)	Issuing date: 05/09/2016	

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.
In case of shortness of breath, give oxygen.
If victim has stopped breathing:
administer CPR (cardio-pulmonary resuscitation)
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.
Immediate medical attention is required.
- Ingestion : Do NOT induce vomiting.
If victim is conscious:
Rinse mouth with water.
Do not leave the victim unattended.
Risk of product entering the lungs on vomiting after ingestion.
Lay victim on side.
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.

SECTION 5: Firefighting measures

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

5.1 Extinguishing media

SAFETY DATA SHEET		
SULFURIC ACID 78%		
Revision: 2. US (EN)	Issuing date: 05/09/2016	

Suitable extinguishing media : Dry chemical

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.
 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.
 Acid-resistant protective clothing

Specific fire fighting methods : Fight fire with normal precautions from a reasonable distance.

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.

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
 Soak up with inert absorbent material.
 Scrape up.
 Keep in suitable, closed containers for disposal.

SAFETY DATA SHEET		
SULFURIC ACID 78%		
Revision: 2. US (EN)	Issuing date: 05/09/2016	

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.
 Avoid contact with the skin and the eyes.
 When diluting, always add the product to water. Never add water to the product.
 Reacts violently with:
 bases.
- 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
 diked

Storage stability

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

7.3 Specific end use(s)

no data available

SAFETY DATA SHEET		
SULFURIC ACID 78%		
Revision: 2. US (EN)	Issuing date: 05/09/2016	

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 for this material.

Eye contact should be prevented through the use of:

SULFURIC ACID 78%

Revision: 2. US (EN)

Issuing date: 05/09/2016

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 : oily Physical state: liquid Color: colorless
Odor	: odorless
Odor Threshold	: no data available
pH	: 1.0 (1 % (m/v))
Melting point/range	: 16 °F (-9 °C)
Boiling point/boiling range	: 374 °F (190 °C) (760 mmHg (1,013.25 hPa))
Flash point	: Not applicable
Evaporation rate (Butylacetate = 1)	: no data available
Flammability (solid, gas)	: no data available
Flammability (liquids)	: no data available
Flammability / Explosive limit	: no data available
Autoignition temperature	: no data available

SULFURIC ACID 78%

Revision: 2. US (EN)

Issuing date: 05/09/2016

Vapor pressure	:	1.2 mmHg (1.60 hPa) (104 °F (40 °C))
Vapor density	:	3.4
Density	:	Relative density : 1.71 (61 °F (16 °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

Molecular weight	:	98.08 g/mol
Reactions with water / air	:	Reacts violently with water.

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

no data available

10.2 Chemical stability

Chemical stability : Stable under recommended storage conditions.

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

SULFURIC ACID 78%

Revision: 2. US (EN)

Issuing date: 05/09/2016

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 : On combustion or on thermal decomposition (pyrolysis), releases:
 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

SULFURIC ACID 78%

Revision: 2. US (EN)

Issuing date: 05/09/2016

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

SAFETY DATA SHEET		
SULFURIC ACID 78%		
Revision: 2. US (EN)	Issuing date: 05/09/2016	

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
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
- NTP
- IARC

SULFURIC ACID 78%

Revision: 2. US (EN)

Issuing date: 05/09/2016

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/m³

Method: OECD Test Guideline 414
no teratogenic effects have been observed

Mouse
Application Route: inhalation (mist)
NOAEC teratogenicity: 19.3 mg/m³

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/m³
Target Organs: Larynx
Method: OECD Test Guideline 412
Symptoms: Local irritation
Unpublished reports

inhalation (mist) 78 Weeks - Monkey
LOAEC: 0.38 mg/m³
Target Organs: Respiratory Tract
Symptoms: Local irritation, Respiratory disorders
Published data

Repeated inhalation of aerosols may cause adverse effects on health

SULFURIC ACID 78%

Revision: 2. US (EN)

Issuing date: 05/09/2016

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

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

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 > 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

SULFURIC ACID 78%

Revision: 2. US (EN)

Issuing date: 05/09/2016

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

SAFETY DATA SHEET		
SULFURIC ACID 78%		
Revision: 2. US (EN)	Issuing date: 05/09/2016	

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 1830

14.2 Dangerous Good Description UN 1830 SULFURIC ACID, 8, II

14.3 Transport hazard class 8

14.4 Packing group
Packing group II
Label(s) 8
ERG No 137

14.5 Environmental hazards NO
Marine pollutant

SAFETY DATA SHEET		
SULFURIC ACID 78%		
Revision: 2. US (EN)	Issuing date: 05/09/2016	

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: 1,282 lb

TDG

14.1 UN number UN 1830
14.2 Dangerous Good Description UN 1830 SULFURIC ACID, 8, II
14.3 Transport hazard class 8
14.4 Packing group
Packing group II
Label(s) 8
ERG No 137
14.5 Environmental hazards NO
Marine pollutant

IMDG

14.1 UN number UN 1830
14.2 Dangerous Good Description UN 1830 SULPHURIC ACID, 8, II
14.3 Transport hazard class 8
14.4 Packing group
Packing group II
Label(s) 8
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 1830
14.2 Dangerous Good Description UN 1830 SULPHURIC ACID, 8, II

SAFETY DATA SHEET		
SULFURIC ACID 78%		
Revision: 2. US (EN)	Issuing date: 05/09/2016	

<u>14.3 Transport hazard class</u>	8
<u>14.4 Packing group</u>	II
Packing group	II
Label(s):	8
Packing instruction (cargo aircraft)	855
Max net qty / pkg	30.00 L
Packing instruction (passenger aircraft)	851
Max net qty / pkg	1.00 L
<u>14.5 Environmental hazards</u>	NO
Marine pollutant	
<u>14.6 Special precautions for user</u>	
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

SAFETY DATA SHEET		
SULFURIC ACID 78%		
Revision: 2. US (EN)	Issuing date: 05/09/2016	

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 78 %

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	

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
Sulfuric acid	7664-93-9	1000 lb

SARA 302 Reportable Quantity

Ingredients	CAS-No.	Reportable quantity
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

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16: Other information

SAFETY DATA SHEET		
SULFURIC ACID 78%		
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.