

## SAFETY DATA SHEET

Preparation Date: 4/25/2019

Revision date 4/25/2019

Revision Number: G1

### 1. IDENTIFICATION

#### Product identifier

**Product code:** S-670  
**Product Name:** SULFURIC ACID, 20 PERCENT (V/V) SOLUTION

#### Other means of identification

**Synonyms:** No information available  
**CAS #:** Mixture  
**RTECS #** Not available  
**CI#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** No information available.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>  
**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Tom Tyner (USA - West Coast)  
**Contact Person:** Ibad Tirmiz (USA - East Coast)

### 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Inhalation (Gases)	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Corrosive to metals	

#### Label elements

##### **Danger**

##### **Hazard statements**

Toxic if inhaled  
 Causes severe skin burns and eye damage  
 May be corrosive to metals



**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Not available

**Precautionary Statements - Prevention**

Use only outdoors or in a well-ventilated area  
Do not breathe mist or vapors  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Keep only in original container

**Precautionary Statements - Response**

*Immediately call a POISON CENTER or physician*  
Absorb spillage to prevent material damage  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water  
Wash contaminated clothing before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician.  
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight-%
Water	7732-18-5	70.85
Sulfuric Acid	7664-93-9	29.15

**4. FIRST AID MEASURES**

**First aid measures**

**General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s)

involved and take precautions to protect themselves. First aider needs to protect himself.

**Skin Contact:** Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician immediately.

**Eye Contact:** Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. Call a physician immediately.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If victim is conscious, give water or milk. Follow with Milk of Magnesia or egg whites beaten with water. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

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

**Symptoms** Severe skin and eye irritation or burns  
Irritating to respiratory system  
May cause chemical burns to the respiratory tract  
Can burn mouth, throat, and stomach  
Causes serious gastrointestinal tract irritation or burns

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

**Notes to Physician:** Treat symptomatically.

#### **Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

## **5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

**Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

**Unsuitable Extinguishing Media:** No information available.

### **Specific hazards arising from the chemical**

**Hazardous combustion products** No information available.

**Specific hazards** For Sulfuric Acid: Contact with metals may evolve flammable hydrogen gas. Metal acetylides (Monocesium and Monorubidium), and carbides ignite with concentrated sulfuric acid. White Phosphorous + boiling Sulfuric acid or its vapor ignites on contact. May ignite other combustible materials. May cause fire when sulfuric acid is mixed with Cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorous (III) oxide, and oxidizing

agents such as chlorates, halogens, permanganates. Mixtures of sulfuric acid and any of the following can explode: p-nitrotoluene, pentasilver trihydroxydiaminophosphate, perchlorates, alcohols with strong hydrogen peroxide, ammonium tetraperoxychromate, mercuric nitrite, potassium chlorate, potassium permanganate with potassium chloride, carbides, nitro compounds, nitrates, carbides, phosphorous, iodides, picratres, fulminates, dienes, alcohols (when heated) Nitramide decomposes explosively on contact with concentrated sulfuric acid. 1,3,5-Trinitrosohexahydro-1,3,5-triazine + sulfuric acid causes explosive decomposition.

### **Special Protective Actions for Firefighters**

**Specific Methods:**

No information available

**Special Protective Equipment for Firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## **6. ACCIDENTAL RELEASE MEASURES**

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

**Personal Precautions:**

Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Prevent entry into waterways, sewers, basements or confined areas.

### **Methods and material for containment and cleaning up**

**Methods for containment**

Stop leak if you can do it without risk.

**Methods for cleaning up**

Neutralize with Sodium carbonate or Sodium bicarbonate. Dilute with water. Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Clean contaminated surface thoroughly.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

**Technical Measures/Precautions:**

Use only in area provided with appropriate exhaust ventilation. Keep away from incompatible materials.

**Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

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

**Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original

container. May corrode metallic surfaces. Do not store in uncoated metallic containers. Store in a segregated and approved area. Store away from incompatible materials.

**Incompatible Materials:**

- Oxidizing agents
- Reducing agents
- Organic materials
- Combustible materials
- Bases
- Amines
- Metals
- Acids

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters

**National occupational exposure limits**

**United States**

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Water	7732-18-5	None	None	None	None
Sulfuric Acid	7664-93-9	1 mg/m <sup>3</sup> TWA	1 mg/m <sup>3</sup> TWA	0.2 mg/m <sup>3</sup> TWA thoracic particulate matter	None

**Canada**

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Water	7732-18-5	None	None	None	None
Sulfuric Acid	7664-93-9	1 mg/m <sup>3</sup> TWA 3 mg/m <sup>3</sup> STEL	0.2 mg/m <sup>3</sup> TWA thoracic	None	None

**Australia and Mexico**

Component	CAS No	Australia	Mexico
Water	7732-18-5	None	None
Sulfuric Acid	7664-93-9	3 mg/m <sup>3</sup> STEL 1 mg/m <sup>3</sup> TWA	0.2 mg/m <sup>3</sup> TWA

Appropriate engineering controls

**Engineering measures to reduce exposure:**

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

**Personal Protective Equipment**

**Eye protection:** Face-shield.

**Skin and body protection:** Chemical resistant apron  
Long sleeved clothing  
Gloves  
If working with large quantities:

Chemical resistant protective suit  
Boots

**Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid	<b>Appearance:</b> Clear.	<b>Color:</b> Colorless.
<b>Odor:</b> No information available.	<b>Taste</b> No information available.	<b>Formula</b> No information available
<b>Molecular/Formula weight (g/mole):</b> No information available	<b>Flammability (solid, gas)</b> Not flammable	<b>Flashpoint (°C/°F):</b> No information available
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> No information available	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> No information available	<b>Bulk density:</b> No information available	<b>Density (g/cm3):</b> No information available
<b>Specific gravity:</b> 1.20	<b>pH</b> No information available	<b>Vapor pressure @ 20°C (kPa):</b> No information available
<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available	<b>VOC content (g/L):</b> No information available
<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> No information available	<b>Viscosity:</b> No information available
<b>Miscibility:</b> No information available	<b>Solubility:</b> Freely soluble in water	

## 10. STABILITY AND REACTIVITY

### Reactivity

For Sulfuric Acid:

It reacts with alcohols and amines

Incompatible (can react explosively or dangerously) with the following: ACETIC ACID, ACRYLIC ACID, AMMONIUM HYDROXIDE, CRESOL, CUMENE, DICHLOROETHYL ETHER, ETHYLENE CYANOHYDRIN, ETHYLENEIMINE, NITRIC ACID, 2-NITROPROPANE, PROPYLENE OXIDE, SULFOLANE, VINYLIDENE CHLORIDE, DIETHYLENE GLYCOL MONOMETHYL ETHER, ETHYL ACETATE, ETHYLENE CYANOHYDRIN, ETHYLENE GLYCOL MONOETHYL ETHER ACETATE, GLYOXAL, METHYL ETHYL KETONE, dehydrating agents, organic materials, moisture (water), Acetic anhydride, Acetone, cyanohydrin, Acetone+nitric acid, Acetone + potassium dichromate, Acetonitrile, Acrolein, Acrylonitrile, Acrylonitrile+water, Alcohols + hydrogen peroxide, ally compounds such as Allyl alcohol, and Allyl Chloride, 2-Aminoethanol, Ammonium hydroxide, Ammonium triperchromate, Aniline, Bromate + metals, Bromine pentafluoride, n-Butyraldehyde, Carbides, Cesium acetylene carbide, Chlorates, Cyclopentanone oxime, chlorinates, Chlorates + metals, Chlorine trifluoride, Chlorosulfonic acid,

2-cyano-4-nitrobenzenediazonium hydrogen sulfate, Cuprous nitride, p-chloronitrobenzene, 1,5-Dinitronaphthlene + sulfur, Diisobutylene, p-dimethylaminobenzaldehyde, 1,3-Diazidobenzene, Dimethylbenzylcarbinol + hydrogen peroxide, Epichlorohydrin, Ethyl alcohol + hydrogen peroxide, Ethylene diamine, Ethylene glycol and other glycols, , Ethylenimine, Fulminates, hydrogen peroxide, Hydrochloric acid, Hydrofluoric acid, Iodine heptafluoride, Indane + nitric acid, Iron, Isoprene, Lithium silicide, Mercuric nitride, Mesityl oxide, Mercury nitride, Metals (powdered), Nitromethane, Nitric acid + glycerides, p-Nitrotoluene, Pentasilver trihydroxydiaminophosphate, Perchlorates, Perchloric acid, Permanganates + benzene, 1-Phenyl-2-methylpropyl alcohol + hydrogen peroxide, Phosphorus, Phosphorus isocyanate, Picrates, Potassium tert-butoxide, Potassium chlorate, Potassium Permanganate and other permanganates, halogens, amines, Potassium Permanganate + Potassium chloride, Potassium Permanganate + water, Propiolactone (beta)-, Pyridine, Rubidium acetelyene carbide, Silver permanganate, Sodium, Sodium carbonate, sodium hydroxide, Steel, styrene monomer, toluene + nitric acid, Vinyl acetate, Thalium (I) azidodithiocarbonate, Zinc chlorate, Zinc Iodide, azides, carbonates, cyanides, sulfides, sulfites, alkali hydrides, carboxylic acid anhydrides, nitriles, olefinic organics, aqueous acids, cyclopentadiene, cyano-alcohols, metal acetylides  
Evolves flammable hydrogen gas on contact with metals  
Concentrated sulfuric acid oxidizes, dehydrates, or sulfonates most organic compounds

### Chemical stability

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Incompatible materials.

**Incompatible Materials:**  
Oxidizing agents  
Reducing agents  
Organic materials  
Combustible materials  
Bases  
Amines  
Metals  
Acids

**Hazardous decomposition products:** Sulfur oxides.

### Other Information

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Skin. Inhalation. Ingestion.

### Acute Toxicity

### Component Information

Water	
CAS No	7732-18-5

**LD50/oral/rat** = > 90 mL/kg Oral LD50 Rat  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rabbit** = No information available

**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50information** = No information available

Sulfuric Acid	
CAS No	7664-93-9

**LD50/oral/rat** = 2140 mg/kg Oral LD50 Rat  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rabbit** = No information available  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = 347 ppm 1 h  
420 ppm 1 h  
510 mg/m<sup>3</sup> Inhalation LC50 Rat 2h  
85-103 mg/m<sup>3</sup> 1 h  
**LC50/inhalation/mouse** = 320 mg/m<sup>3</sup> 2 h  
**Other LD50 or LC50information** = No information available

### Product Information

**LD50/oral/rat** =  
**Value - Acute Tox** = No information available

**LD50/oral/mouse** =  
**Value - Acute Tox Oral** = No information available

**LD50/dermal/rabbit**  
**Value - Acute Tox** = No information available

**LD50/dermal/rat**  
**VALUE - Acute Tox Dermal** = No information available

**LC50/inhalation/rat**  
**VALUE-Vapor** = No information available  
**VALUE-Gas** = No information available  
**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**  
**VALUE-Vapor** = No information available  
**VALUE - Gas** = No information available  
**VALUE - Dust/Mist** = No information available

### Symptoms

**Skin Contact:** Severe skin irritation. Causes skin burns.

**Eye Contact:** Severe eye irritation. Causes eye burns.

**Inhalation** Toxic by inhalation. Causes severe irritation of the respiratory tract and mucous membranes with sore throat, coughing, sneezing, shortness of breath, and delayed lung edema. Can cause chemical burns (corrosive action) to the respiratory tract and mucous membranes. Inhalation may be fatal as a result of bronchospasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. May affect cardiovascular system (hypotension, depressed cardiac output, bradycardia). Circulatory shock/collapse with clammy skin, weak and rapid pulse, shallow respiration, and scanty urine may follow. Ischemic liver and heart lesions, kidney failure may occur several hours after unchecked circulatory collapse. Circulatory shock is often the immediate

cause of death. May also affect teeth(changes in teeth and supporting structures - erosion, discoloration).

**Ingestion** Causes digestive or gastrointestinal tract burns. Corrosive to the mouth, throat, and stomach. May cause permanent damage to the digestive tract. May cause perforation of the digestive tract. May cause gastritis. May cause abdominal pain. Ingestion may cause nausea, vomiting. Vomit may resemble "coffee grounds". May cause metabolic acidosis.

**Aspiration hazard** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic Toxicity** Inhalation: Prolonged or repeated inhalation may affect behavior (muscle contraction or spasticity), urinary system (kidney damage), and respiratory system/lungs(pulmonary edema, lung damage/changes in lung function with chronic bronchitis and emphysema), teeth (dental discoloration, erosion).Skin: Prolonged or repeated skin contact may cause dermatitis.Eyes: Conjunctivitis is also a common finding with chronic exposure.

**Sensitization:** No information available.

**Mutagenic Effects:** No information available

**Carcinogenic effects:** Not considered carcinogenic. Cancer Status: The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mists containing sulfuric acid" as a known human carcinogen, (IARC Group 1). However, this classification applies only to mists containing sulfuric acid generated during an industrial process and not to (almost) pure sulfuric acid or sulfuric acid solutions; The ACGIH has classified "strong inorganic acid mists containing sulfuric acid" as a suspected human carcinogen (ACGIH Group A2). However, this classification applies only to mists containing sulfuric acid generated during an industrial process and not to (almost) pure sulfuric acid or sulfuric acid solutions.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Sulfuric Acid	7664-93-9	Monograph 54 [1992] occupational exposure to mists and vapours from sulfuric acid and other strong inorganic acids	A2 Suspected Human Carcinogen (contained in strong inorganic acid mists)	Not listed	Present	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:**  
**Teratogenic Effects:**

No information available  
For Sulfuric Acid:  
Developmental effects and Teratogenicity: According to the Registry of Toxic Effects of Chemical Substances (RTECS reference - Murry et al, "Embryotoxicity of Inhaled Sulfuric Acid Aerosol in Mice and Rabbits", Journal of Environmental Science and Health, Part C, Vol. 13, pages 251-266, 1979), musculoskeletal developmental abnormalities were found in rabbits at a dose of 20 mg/m<sup>3</sup> for 7 hrs. However, REPROTOX and Shepard's Catalog of Teratogenic Agents, citing this same study, stated that inhalation of sulfuric acid fumes did not increase congenital anomalies in the offspring of treated pregnant mice or rabbits. Furthermore, the Hazard Substance Data Bank (HSDB) also stated that in a developmental toxicity study conducted under a method similar to OECD test Guideline 414 that no significant effects on mean numbers of implants/dam, live fetuses/litter or resorptions/litter were observed in mice and rabbits exposed by inhalation to sulfuric acid aerosol at 5 and 20 mg/m<sup>3</sup> during gestation and therefore could not be considered embryotoxic, or fetotoxic.

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Target Organs:** Skin. Eyes. Respiratory system.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** Aquatic environment.  
*Sulfuric Acid - 7664-93-9*  
**Fish** LC50: >500mg/L (96h, Brachydanio rerio)  
**Crustacea** EC50: =29mg/L (24h, Daphnia magna)  
**Persistence and degradability:** No information available  
**Bioaccumulative potential:** No information available.  
**Mobility in soil** No information available  
**Other adverse effects** No information available.

**13. DISPOSAL CONSIDERATIONS**

**Disposal Methods**

**Waste from residues / unused products:**  
Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**  
Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Water	7732-18-5	None	None	None	None
Sulfuric Acid	7664-93-9	None	None	None	None

**14. TRANSPORT INFORMATION**

**DOT**

**UN-No:** UN2796  
**Proper Shipping Name:** Sulfuric acid solution  
**Hazard Class** 8  
**Subsidiary Class** No information available  
**Packing group:** II  
**Emergency Response Guide Number** 157  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** A3, A7, B2, B15, IB2, N6, N34, T8, TP2  
**Symbol(s):** No information available  
**Description:** UN2796, Sulfuric acid solution, 8, II

**TDG (Canada)**

**UN-No:** UN2796  
**Proper Shipping Name:** Sulfuric acid solution  
**Hazard Class** 8  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant** No Information available  
**Description:** UN2796, Sulfuric acid solution, 8, II

**ADR**

**UN Number** UN2796  
**Proper Shipping Name:** Sulphuric acid solution  
**Transport hazard class(es)** 8  
**Packing group** II  
**Subsidiary Risk:** No information available  
**Description:** UN2796, Sulphuric acid solution, 8, II

**IMDG**

**UN-No:** UN2796  
**Proper Shipping Name:** Sulfuric acid solution  
**Hazard Class:** 8  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Marine Pollutant** No information available  
**EMS:** F-A  
**Description** UN2796, Sulphuric acid solution, 8, II

**RID**

**UN Number** UN2796  
**Proper Shipping Name:** Sulphuric acid solution  
**Transport hazard class(es)** 8  
**Subsidiary Risk:** No information available  
**Packing group** II  
**Description:** UN2796, Sulphuric acid solution, 8, II

**ICAO (air)**

**UN-No:** UN2796  
**Proper Shipping Name:** Battery fluid, acid  
**Hazard Class** 8  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** UN2796, Battery fluid, acid, 8, II

**IATA**

**UN Number** UN2796  
**Proper Shipping Name:** Battery fluid, acid  
**Transport hazard class(es)** 8  
**Subsidiary Risk:** No information available  
**Packing group** II  
**Precautionary Statements - Response** 8L  
**Special Provisions** No information available  
**Description:** UN2796, Battery fluid, acid, 8, II

**15. REGULATORY INFORMATION**

**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Water	7732-18-5	PresentACTIV E	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
Sulfuric Acid	7664-93-9	PresentACTIV E	Present KE-32570	Present	Present (1)-430	Present	Present	Present 231-639-5

**U.S. Regulations**

*Sulfuric Acid*

**Massachusetts RTK:** Present  
**New Jersey RTK Hazardous Substance List:** 1761  
**New Jersey (EHS) List:** 1761 500 lb TPQ  
**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present  
**Pennsylvania RTK:** Environmental hazard  
**Pennsylvania RTK - Environmental Hazard List** Present  
**Minnesota - Hazardous Substance List:** Present  
**New York Release Reporting - List of Hazardous Substances:**  
 1000 lb RQ  
 100 lb RQ  
**Louisiana Reportable Quantity List for Pollutants:** 1000lbfinal RQ  
 454kgfinal RQ  
**California Directors List of Hazardous Substances:** Present  
**FDA - Food Additives Generally Recognized as Safe (GRAS):** 21 CFR 184.1095  
**FDA - 21 CFR - Total Food Additives** 172.560, 172.892, 173.385, 176.170, 176.180, 176.210, 177.2800, 178.1010, 179.45,  
**- List Sourced from EAFUS** 184.1095, 73.85

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Sulfuric Acid	7664-93-9	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Component	CAS No	CERCLA - Hazardous Substances and their Reportable	Section 302 Extremely Hazardous Substances	Section 302 Extremely Hazardous Substances and	Section 313 - Chemical Category	Section 313 - Reporting de minimis

		Quantities	and TPQs	RQs		
Water	7732-18-5	None	None	None	None	None
Sulfuric Acid	7664-93-9	1000 lb final RQ 454 kg final RQ	1000 lb EPCRA RQ	None	None	1.0 % de minimis concentration

## U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) - Health and Safety Reporting
Water	7732-18-5	Not Applicable	Not Applicable
Sulfuric Acid	7664-93-9	Not Applicable	Not Applicable

## Canada

### WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component  
Water  
7732-18-5 ( 70.85 )  
Sulfuric Acid  
7664-93-9 ( 29.15 )

WHMIS 2015 Hazard Classification  
Not a dangerous product according to HPR classification criteria

Corrosive to Metals - Category 1: H290 May be corrosive to metals. (85% (30.8); potentially corrosive to metals; the supplier should be contacted for more information); Acute toxicity - Inhalation - Category 2: H330 Fatal if inhaled. (85% (30.8)); Acute toxicity - Inhalation - Category 3: H331 Toxic if inhaled. (50% (14.2 N)); Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract (2% (0.4 N)); Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage. (50% (14.2 N)); Skin corrosion/irritation - Category 1A: H314 Causes severe skin burns and eye damage. (2% (0.4 N)); Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage. (2% (0.4 N))

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

## DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Water	7732-18-5	Present	Not Listed
Sulfuric Acid	7664-93-9	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Water	7732-18-5	Not listed
Sulfuric Acid	7664-93-9	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Water	7732-18-5	Not listed
Sulfuric Acid	7664-93-9	Not listed

## EU Classification

### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Water	7732-18-5	
Sulfuric Acid	7664-93-9	

		Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage.016-020-00-8 Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage. (C >= 15 %); Skin corrosion/irritation - Skin Irrit. 2: H315 Causes skin irritation. (5 % <= C <15 %); Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation. (5 % <= C <15 %)016-020-00-8
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EU - CLP (1272/2008)

**R-phrase(s)**

R35 - Causes severe burns

**S -phrase(s)**

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S30 - Never add water to this product

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S 1/2 - Keep locked up and out of the reach of children.

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Water	7732-18-5		No information	
Sulfuric Acid	7664-93-9	C; R35	15%<=C C; R35 5%<=C<15% Xi; R36/38	S: (1/2)-26-30-45

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

C - Corrosive

C



**16. OTHER INFORMATION**

Preparation Date: 4/25/2019  
 Revision date: 4/25/2019  
 Prepared by: Sonia Owen

**Disclaimer:** All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no

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**End of Safety Data Sheet**