

HazTech Systems, Inc.

SAFETY DATA SHEET

Revision number: 2 Revision date: 05/06/2015

1. IDENTIFICATION

Product name: Sulfuric acid, reagent, acs

Product code: RE2304

Synonyms: Oil of Vitriol, Hydrogen Sulfate, Dihydrogen Sulfate

CAS: 7664-93-9

RTECS # WS5600000

CI#: Not available

Recommended use: Fertilizer compositions. Dyes. Echant. Laboratory reagent.

Uses advised against:

No information available

Company:

HazTech Systems, Inc. 4996 Gold Leaf Dr Mariposa, CA 95338 U.S.A.

Telephone:

1-800-543-5487 / 1-209-966-8088

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1-209-966-8089

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sales@hazcat.com www.hazcat.com Chemical Emergencies:

HazTech Systems, Inc. (8:00am - 5:00pm) PST

1-800-543-5487

Transportation Emergencies:

Chemtrec 24-Hour 1-800-424-9300 (U.S.A.) 1-703-527-3887 (International)

2. HAZARD(S) IDENTIFICATION

Classification

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

Acute toxicity - Inhal ation (Gases)	Category 2
Acute toxicity - Inhalation (Vapors)	Category 2
S kin corrosion/irritation	Category 1
Serious eye damage leye irritation	Category 1

Label elements

Danger

Hazard statements

Fatal if inhaled

Causes severe skin burns and eye damage

Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

May be harmful if swallowed Reacts violently with water

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Wear respiratory protection

Wash face, hands and any exposed skin thoroughly after handling

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

Sulfuric acid, reagent, acs

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2. HAZARDS IDENTIFICATION

Precautionary Statements - Response

Specific treatment is ur gent (see .? on this label)

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see .? on this label)

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 doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

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

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Sulfuric Acid	7664-93-9	100	*
7664-93-9			

4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centres in each State capital city can provide additional

assistance for scheduled poisons (13 1126). 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 eye 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 Centre immediately.

Most important symptoms and effects, both acute and delayed

Symptoms Severe skin and eye 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. FIREFIGHTING 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:

Specific hazards arising from the chemical

Hazardous Combustion Products:

No information available.

No information available.

5. FIREFIGHTING MEASURES

Specific hazards:

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.

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May ignite other combustible materials.

May cause fire when sulfuric acid is mixed with

Cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phorphorous (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, fulminats, 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 decompositon.

Containers may explode when heated or if contaminated

with water

Reaction with water may generate much heat which will

increase the concentration of fumes in the air

Special Protective Actions for Firefighters

Specific Methods:

Water mist may be used to cool closed containers. Do not use water on material itself. Do not get water inside containers. When material is not involved in a fire, do not use water on material itself. DO NOT use combustible materials such as sawdust.

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

Special Protective Equipment for Firefighters:

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 c ontact 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. Do not allow contact with water. 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.

7. HANDLING AND STORAGE

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 segrated and approved

area. Do not store near combustible materials. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents. Reducing agents. Organic materials. Combustible materials. Bases. Amines. Metals. Water. Acids.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
	1 mg/m ³ TWA	1 mg/m ³ TWA	0.2 mg/m 3 TWA thoracic	None
Sulfuric Acid - 7664-93-9			fraction	

Canada

Components	Alberta	British Columbia	Ontario	Quebec
	1 mg/m ³ TWA	0.2 mg/m ³ TWA	0.2 mg/m ³ TWA thoracic	1 mg/m ³ TWAEV
Sulfuric Acid - 7664-93-9	3 mg/m ³ STEL			3 mg/m ³ STEV

Australia and Mexico

Components	Australia	Mexico
Sulfuric Acid	3 mg/m ³ STEL	1 mg/m ³ TWA
7664-93-9	1 mg/m ³ TWA	, and the second

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne

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concentrations of vapors and mist below their respective

threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eve protection: Face-shield.

Skin and body protection: Chemical resistant protective suit. Gloves. boots.

Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Respiratory protection: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Hygiene measures:

Wash hands before breaks and immediately after handling the product.

PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Appearance: Color: Liquid. Viscous. Oily. Colorless. Odor: Taste Formula: Odorless, but has a choking odor when Strong. Acid. H2SO4

Flash point (°C):

Molecular/Formula weight:

98.08

Flash Point Tested according to:

Not available

Autoignition Temperature (°C/°F):

No information available Boiling point/range($^{\circ}$ C/ $^{\circ}$ F):

270-337 °C/518/638.6 °F Density (g/cm3):

No information available Evaporation rate:

No information available Odor threshold (ppm): No information available

Miscibility:

No information available

No data available Lower Explosion Limit (%): No information available

No information available

Decomposition temperature(°C/°F): 340 °C/644 °F

Bulk density:

No information available

Vapor density: 3.4

Partition coefficient

(n-octanol/water): No information available Flashpoint (°C/°F): No information available.

Upper Explosion Limit (%): No information available Melting point/range(°C/°F):

No information available Specific gravity:

1.823-1.84

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Viscosity:

No information available

Solubility:

Easily soluble in cold water

Sulfuric acid is soluble in water with

liberation of much heat Soluble in Ethanol

10. STABILITY AND REACTIVITY

Reactivity

Reacts violently with water

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, DIET HYLENE 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, Acrylonitrile, Acrylonitrile+water, Alcohols + hydrogen peroxide, ally

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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, Perchloricaeid, 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 aceteylene 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 at normal conditions

Possibility of Hazardous Reactions:Hazardous polymerization does not occurConditions to avoid:Incompatible materials. Exposure to water.

Incompatible Materials: Oxidizing agents. Reducing agents. Organic materials. Combustible materials.

Bases. Amines. Metals. Water. Acids.

Hazardous decomposition products: Sulphur oxides.

Other Information

Corrosivity: Extremely corrosive in presence of aluminum

Extremely corrosive in presence of copper

Extremely corrosive in the presence of stainless steel (316) Highly corrosive in the presence of stainless steel (304)

Non-corrosive in the presence of glass Minor corrosive effect on bronze Non-corrosive to lead and mild steel No corrosion data on brass or zinc

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

Sulfuric Acid - 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

 $510 \text{ mg/m}^3 2 \text{ h}$

LC50/inhalation/mouse = $320 \text{ mg/m}^3 2 \text{ h}$

Other LD50 or LC50 information = No information available

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11. TOXICOLOGICAL INFORMATION

Product Information LD50/oral/rat =

VALUE- Acute Tox Oral = 2140mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = No information available

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = 347ppm (1-hr)

VALUE-Dust/Mist = 510mg/m^3 (2-hr)

LC50/Inhalation/mouse

VALUE-Vapor = No information available **VALUE - Gas =** No information available **VALUE - Dust/Mist =** $320 \text{ mg/m}^3 2 \text{ h}$

Symptoms

Ingestion

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

Inhalation Fatal if inhaled. 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 repiratory 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

collpase. Circulatory shock is often the immediate cause of death. May also affect teeth (changes in teeth and supporting structures - erosion, discoloration). May be harmful if swallowed. 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.

No information available

Sensitization: **Mutagenic Effects:** No information available

May cause cancer. However, evidence is inconclusive. Cancer Status: The Carcinogenic effects:

> 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.

11. TOXICOLOGICAL INFORMATION

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Sulfuric Acid	A2 Suspected Human Carcinogen (contained in strong inorganic acid mists)	Group 1 - Monograph 54 [1992] Occupational exposure to mists and vapours from sulfuric acid and other strong inorganic acids	Not listed	Present	Not listed	Not listed

Reproductive toxicityNo data is availableReproductive Effects:No information availableDevelopmental Effects:No information available

Teratogenic Effects: Developmental effects and Teratogenicity: According the the Registry of Toxic

Effects of Chemical Substances (RTECS reference - Murry et al, "Embryrotoxicity 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/m³ 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 congential anomalies in the offspring of treated preganant 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/liter or resorptions/litter were observed in mice and rabbits exposed by inhalation to sulfuric acid aerosol at 5 and 20 mg/m³ during gestation and therefore could not be considered embryotoxic, or

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fetoxic.

Specific Target Organ Toxicity

STOT - single exposure

No information available

No information available

Target Organs: Skin. Eyes. Respiratory system. Teeth.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Sulfuric Acid - 7664-93-9

Freshwater Fish Species Data: 500 mg/L LC50 Brachydanio rerio 96 h static 1

Persistence and degradability:

Bioaccumulative potential:

Mobility:

No information available

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

Components	RCRA - F Series	RCRA - K Series	RCRA - P	RCRA - U Series Wastes
	Wastes	Wastes	Series	
			Wastes	
Sulfuric Acid	None	None	None	None

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DOT

UN-No: UN1830 Sulfuric acid Proper Shipping Name:

Hazard Class:

Subsidiary Risk: Not applicable

Packing Group:

Marine Pollutant No data available

ERG No:

DOT RQ (lbs): No information available

Symbol(s):

TDG (Canada)

UN-No: UN1830 Proper Shipping Name: Sulfuric acid

Hazard Class:

Subsidiary Risk: No information available

Packing Group:

Description: No information available

ADR

UN-No: UN1830 Proper Shipping Name: Sulphuric acid

Hazard Class: Packing Group: Π

Subsidiary Risk: No information available **Classification Code:** No information available Description: No information available

No information available **CEFIC Tremcard No:**

IATA

UN-No: UN1830 Proper Shipping Name: Sulphuric acid

Hazard Class:

Subsidiary Risk: No information available

Packing Group: Π **ERG Code:** 8L

No information available Description:

IMO / IMDG

UN-No: UN1830 Proper Shipping Name: Sulphuric acid

Hazard Class:

Subsidiary Risk: No information available

Packing Group:

No information available Description: **IMDG Page:** No information available Marine Pollutant No information available

EMS: F-A

MFAG: No information available No information available

Maximum Quantity:

UN-No: UN1830 Sulphuric acid Proper Shipping Name:

Hazard Class: Subsidiary Risk: 8 Packing Group: II

Classification Code: No information available

No information available **Description:**

ICAO

RID

UN-No: UN1830 Proper Shipping Name: Sulphuric acid

Hazard Class:

No information available Subsidiary Risk:

Packing Group:

Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Sulfuric Acid	Present	Present KE- 32570	Present	Present (1)- 724 (1)-430	Present	Present	Present 231-639-5

U.S. Regulations

Sulfuric Acid

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: Present

New Jersey (EHS) List: Present

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

Louisana 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

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

Chemicals Known to the State of California to Cause Cancer:

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table on next page)

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 on next page)

15. REGULATORY INFORMATION

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
	Listed under strong inorganic mists containing	Not Listed	Not Listed	Not Listed
	sulfuric acid			

CERCLA/SARA

Components	CERCLA - Hazardous	Section 302 Extremely	Section 302 Extremely	Section 313 -	Section 313 - Reporting
	Substances and their	Hazardous	Hazardous	Chemical Category	de minimis
	Reportable Quantities	Substances and TPQs	Substances and RQs		
Sulfuric Acid	1000 lb final RQ	1000 lb TPQ	None	None	1.0 % de minimis
	454 kg final RQ				concentration

U.S. TSCA

1	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Sulfuric Acid	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

D1A Very toxic materials

E Corrosive material

Sulfuric Acid

D1A E including >51%, <=51%

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -	
Sulfuric Acid	1 %	
Inventory		
Components	Canada (DSL)	Canada (NDSL)
Sulfuric Acid	Present	Not Listed
Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting
Sulfuric Acid	Not listed	Not listed

EU Classification

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.

Components	Classification	Concentration Limits:	Safety Phrases
Sulfuric Acid	C; R35	15%<=C: C; R:35	S1/2 S26 S30 S45
		5%<=C<15%: Xi; R:36/38	

The product is classified in accordance with Annex VI to Directive 67/548/EEC Indication of danger:

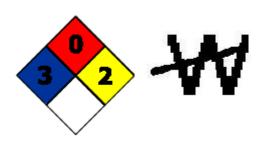
C - Corrosive.



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16. OTHER INFORMATION

NFPA HMIS Personal Protective Equipment







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Prepared by: HazTech Systems, Inc.