MATERIAL SAFETY DATA SHEET

Sulfuric Acid Solution 5.0 Normal Aqueous

SECTION 1 . Product and Company Idenfication

Product Name and Synonym: Sulfuric Acid Solution 5.0 Normal Aqueous

Product Code: 230-12-5

Health:	3
Flammability:	0
Reactivity:	2

Hazard Rating:

Least	Slight	Moderate	High	Extreme
0	1	2	3	4

NA = Not Applicable NE = Not Established

Material Uses:

Manufacturer: OFI Testing Equipment, Inc.
11302 Steeplecrest Drive
Houston, TX 77065 USA
Phone: (713) 880-9885
Fax: (713) 880-9886

Entry Date : 7/1/2009

Print Date: 9/13/2010

24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

SECTION 2 HAZARD IDENTIFICATION

Causes severe irritation and burns. May Be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Emergency Overview:Poison! Danger! Corrosive. Liquid and mist cause severe burns to all body tissue. May be fatal if
swallowed or contacted with skin. Harmful if inhaled. Affects teeth. Water reactive. Cancer hazard. Strong inorganic acid mists containing sulfuric acid can cause cancer. Risk of cancer depends on duration and level of exposure.
Inhalation:Corrosive! Effects should be less severe than from exposure to higer concentrations of
sulfuric acid. Symptoms may include irritation of the nose and throat, labored breathing, as well as lung edema, damage to mucous membranes and upper respiratory tract.
Ingestion:Corrosive! Effects should be less severe than from exposure to higher concentrations of
sulfuric acid. Symptoms include severe burns of the mouth, throat, and stomach. Circulatory collapse with clammy skin, weak and rapid pulse, shallow respirations, and scanty urine may follow ingestion or skin contact. Circulatory shock is often the immediate cause of death.
Skin:Corrosive! Can cause Redness, Pain, and Severe Skin Burns. Circulatory Collapse with Clammy
Skin, Weak and Rapid Pulse, Shallow Respirations, and Scanty Urine may Follow Skin Contact or Ingestion. Circulatory Shock is Often the Immediate cause of Death.
Eye Contact:Corrosive! Contact can cause Blurred Vision, Redness, Pain and Severe Tissue Burns. Can
Cause Blindness.
Chronic Exposure:Long-Term Exposure to Mist or Vapors may Cause Damage to Teeth.
Chronic Exposure to Mists
Containing Sulfuric Acid is a Cancer Hazard.
Aggravated by Exposure:Persons with Pre-Existing skin Disorders or Eye Disease May be more Susceptable to the
Effects ot this Substance.

SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
☑	Sulfuric Acid	CAS# 7664-93-9	14%	V/V	OSHA TWA 1 mg/m^3, ACGIH STEL 3 ppm
☐	Water, Deionized ASTM Type II	CAS# 7732-18-5	Balance	V/V	None Established

SECTION 4 FIRST AID MEASURES

Causes severe irritation and burns. May Be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. if irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type: Any means suitable for extinguishing surrounding fire

Fire / Explosion Hazards: None

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Absorb spill with inert material, then place in a chemical waste container. Neutralize with a weak base.

Accidental Release: Ventilate area of Leak or Spill. Wear Appropritate Personal Protective Equipment as Specified in Section 8. Isolate Hazard Area. Keep Unnecessary and Unprotected Personnel from Entering.
Contain and Recover Liquid when Possible. Neutralize with Alkaline Material (Soda-Ash, Lime), then Absorb with an Inert Material (e.g., Vermiculite, Dry Sand, Earth), and place in a Chemical Waste Container.

SECTION 7 HANDLING AND STORAGE

Do not get in eyes, on skin, on clothing. Avoid breathing vapors or mist. Wash thoroughly after handling.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: None required

Ventilation

Local Exhaust ☑

Mechanical ☐

Protective Gloves: Wear appropriate gloves to prevent skin exposure

Eye Protection: Goggles and Face Shield

Other Protective Equipment:	Wear appropriate clothing to prevent skin exposure

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	Information not available	Percent Volatile by Volume:	>85
Boiling Point:	Information not available	Evaporation Rate	Information not available
Vapor Pressure:	Information not available	Evaporation Standard	
Vapor Density:	Information not available	Auto Ignition Temp	Not applicable
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	Not applicable
Appearance /Odors:	Clear, colorless, odorless liquid	Upper Flamm. Limit in Air	Not applicable
Flash Point:	Information not available		
Specific Gravity:	Information not available		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability:	Stable
Conditions to Avoid:	Material can react violently with strong oxidizing agents, metals, strong bases, amines.
Materials to Avoid:	Oxidizing agents, metals, bases, amines.
Hazardous Decomposition Products:	Oxides of sulfur
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known

SECTION 11 Toxicological Information

Carcenogenic References The International Agency for Research on Cancer (IARC) has Classified “Strong Inorganic Acid
Mists Containing Sulfuric Acid” as a known Human Carcinogen. This Classification applies only to Mists Containing Sulfuric Acid and Not to Sulfuric Acid or Sulfuric Acid Solutions.

SECTION 12 Ecological Information

Environmental Fate:When released into the soil, this material may leach into groundwater. When released into the
air, this material may be removed from the atmosphere to a moderate extent by wet deposition.
When released into the air, this material may be removed from the atmosphere to a moderate extent by dry deposition.
Environmental Toxicity:LC50 Flounder 100 to 330 mg/l/48 hr aerated water/Conditions of bioassay not specified; LC50
Shrimp 80 to 90 mg/l/48 hr aerated water /Conditions of bioassay not specified; LC50 Prawn 42.5 ppm/48 hr salt water /Conditions of bioassay not specified. This material may be toxic to aquatic life.

SECTION 13 Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and
sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 Transport Information

DOT Classification: Sulfuric Acid Solution, 8, UN2796, PG II

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

Chemical Inventory Status –
Part 1:Ingrdient
Sulfuric Acid (7664-93-9)
TSCA Yes
EC Yes
Japan YES
Australia Yes

Chemical Inventory Status –
Part 2:Ingredient
Sulfuric Acid (7664-93-9)
Korea Yes
DSL Yes
NDSL No
Phil. Yes

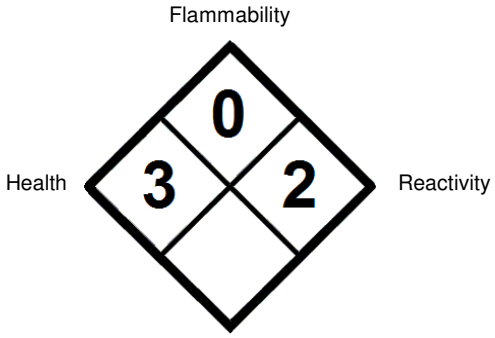
Federal, State & International Regulations –
Part 1: Ingredient.
Sulfuric Acid (7664-93-9)
RQ 1000
TPQ 1000
List YES
Chemical Catg No .

Federal, State &
International Regulations –
Part 2:Ingredient
Sulfuric Acid (7664-93-9)
CERCLA 1000
261.33 No
8(d) No

Chemical Weapons Convention: No
TSCA 12 (b):No
CDTA:YES PURE/LIQUID
SARA 311/312: Acute: YES
Chronic: YES
Fire: No
Pressure: No
Reactivity: YES
Australian Hazchem Code: 2P
Poison Schedule: None allocated

SECTION 16 Additional Information

Conditions aggravated/target organs: Persons with pre-existing respiratory conditions may be more susceptible. Acute: Irritation and burns to skin, eyes, and GI tract. Mists may cause respiratory irritation. Chronic: Dermatitis, eye damage, skin damage. Mists may cause lung damage. Animal tests suggest strong inorganic mists of sulfuric acid may act as a carcinogen.



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Revisions

6/22/2010	0.1	updated msds to 16 section from 10 section msds. STN

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