

# MATERIAL SAFETY DATA SHEET



Sulfuric Acid 10% v/v

## SECTION 1 . Product and Company Identification

Product Name and Synonym: Sulfuric Acid 10% v/v

Product Code: BDH 7358

Material Uses:

Manufacturer:

ANACHEMIA CHEMICALS, LLC

3 Lincoln Blvd.

Rouses Point, NY 12979

(518) 297 - 4444

Entry Date : 07/11/2012

Print Date: 07/11/2012

24 Hour Emergency Assistance : Chemtrec 800-424-9300

Canutec 613-996-6666

Health:	2
Flammability:	0
Reactivity:	0

Hazard Rating:  
Least Slight Moderate High Extreme  
0 1 2 3 4  
NA = Not Applicable NE = Not Established

## SECTION 2 HAZARD IDENTIFICATION

Causes severe irritation and burns. May be harmful if swallowed. May be harmful if absorbed through the skin. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling.

Physical state: Liquid  
Odor: Odorless

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview:

DANGER!  
POISON!

CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS  
HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED  
SUSPECT CANCER HAZARD  
CONTAINS MATERIAL WHICH MAY CAUSE CANCER  
CONTAINS MATERIAL WHICH MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS:  
LUNGS, MUCOUS MEMBRANES, RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA,  
TEETH

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Do not ingest. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Risk of cancer depends on duration and level of exposure.

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion

Potential acute health effects:

Eyes: Corrosive to eyes  
Skin: Toxic in contact with skin. Corrosive to skin.  
Inhalation: Toxic by inhalation. Corrosive to respiratory system.  
Ingestion: Toxic if swallowed. May cause burns to mouth, throat and stomach.  
Carcinogenic effects: Contains material which may cause cancer. Risk of cancer depends on duration of level of exposure.

## Sulfuric Acid 10% v/v

Mutagenic effects: No known significant effects or critical hazards  
Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards

Medical conditions aggravated by overexposure: Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce target organs damage.

See toxicological information (section 11).

### SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input checked="" type="checkbox"/>	Sulfuric Acid	CAS# 7664-93-9	10%	W/W	OSHA TWA 1 mg/m <sup>3</sup> , ACGIH STEL 3 ppm
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	90%	W/W	None Established

### SECTION 4 FIRST AID MEASURES

Causes severe irritation and burns. May be harmful if swallowed. May be harmful if absorbed through the skin. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling.

FIRST AID: SKIN: In case of contact, immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly clean clothing and shoes before reuse. If symptoms persist, 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: Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. If exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

### 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.

Personal precautions: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up: If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain

Sulfuric Acid 10% v/v

material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

**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: NIOSH/MSHA-approved respirator.

Ventilation

Local Exhaust

Mechanical

Protective Gloves: Wear appropriate gloves to prevent skin exposure

Eye Protection: Goggles, Face Shield

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

Product name - United States – Sulfuric Acid

Exposure limits

ACGIH TLV (United States, 1/2006). Notes: Refers to Appendix A—Carcinogens. Thoracic fraction. See Appendix C, paragraph B. Thoracic Particulate Mass TLVs (TPM-TLVs) for those materials that are hazardous when deposited anywhere within the lung airways and the gas-exchange region. Sulfuric acid contained in strong inorganic acid mists ACGIH 2004 Adoption

TWA: 0.2 mg/m<sup>3</sup> 8 hour/hours. Form: All forms

NIOSH REL (United States, 12/2001).

TWA: 1 mg/m<sup>3</sup> 10 hour/hours. Form: All forms

OSHA PEL (United States, 8/1997).

TWA: 1 mg/m<sup>3</sup> 8 hour/hours. Form: All forms

OSHA PEL 1989 (United States, 3/1989).

TWA: 1 mg/m<sup>3</sup> 8 hour/hours. Form: All forms

Consult local authorities for acceptable exposure limits.

Engineering measures: Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal Protection

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Recommended: splash goggles, face shield

Skin: Personal protective equipment for the body should be selected based on the task being performed and risks involved and should be approved by a

specialist before handling this product.

Body recommended: chemical-resistant protective suit and gloves

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Recommended: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	10.56 deg C	Percent Volatile by Volume:	~ 90%
Boiling Point:	~ 100 deg C	Evaporation Rate	0.36
Vapor Pressure:	1 mm Hg@20 deg C	Evaporation Standard	Butylacetate = 1
Vapor Density:	Information not available	Auto Ignition Temp	Not applicable
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	Not applicable
Appearance /Odors:	Colorless 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:	Organic compounds, reducing agents, metals, acids, alkalis, combustibles
Hazardous Decomposition Products:	Oxides of sulfur
Hazardous polymerization:	Will Not Occur

Sulfuric Acid 10% v/v

Conditions to Avoid: None known

**SECTION 11 Toxicological Information**

Toxicity data - United States  
Product/ingredient name – Sulfuric Acid

Test	Result	Route	Species
LD50	2140 mg/kg	Oral	Rat
LD50	2140 mg/kg	Oral	Rat
LD50	2140 mg/kg	Oral	Rat
LC50	320 mg/m3 (2 hour/hours)	Inhalation	Mouse

Chronic effects on humans: CARCINOGENIC EFFECTS Classified 1 (Proven for humans) by IARC, 1 (Known to be human carcinogens) by NTP (Sulfuric Acid). Classified A2 (Suspected for humans) by ACGIH (Sulfuric Acid).

Contains material which causes damage to the following organs: lungs, mucous membranes, upper respiratory tract, skin, eye, lens or cornea, teeth.

Other toxic effects on humans: Very hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive), of ingestion, of inhalation (lung corrosive).

Specific effects

Carcinogenic effects: Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenic effects: No known significant effects or critical hazards.

Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards.

Sensitization

Ingestion: May cause burns to mouth, throat and stomach.

Inhalation: Corrosive to the respiratory system.

Eyes: Corrosive to eyes.

Skin: Corrosive to the skin.

**SECTION 12 Ecological Information**

Environmental precaution: No known significant effects or critical hazards.

Products of degradation: These products are sulfur oxides (SO<sub>2</sub>, SO<sub>3</sub> etc.).

Toxicity of the products of biodegradation: The products of degradation are less toxic than the product itself.

**SECTION 13 Disposal Considerations**

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

RCRA classification: Code: ( C )

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national 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**

United States

HCS Classification:

Toxic material

Corrosive material

Carcinogen

Sulfuric Acid 10% v/v

Target organ effects

U.S. Federal regulations: TSCA 8(b) inventory. Listed

SARA 302/304/311/312 extremely hazardous substances: Sulfuric Acid 10%.  
SARA 302/304 emergency planning and notification: Sulfuric Acid 10%.  
SARA 302/304/311/312 hazardous chemicals: Sulfuric Acid  
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Sulfuric Acid 10%: Delayed (chronic) health hazard

Clean Water Act (CWA) 307: No products were found  
Clean Water Act (CWA) 311: No products were found  
Clean Air Act (CAA) 112 accidental release prevention: No products were found  
Clean Air Act (CAA) 112 regulated flammable substances: No products were found  
Clean Air Act (CAA) 112 regulated toxic substances: No products were found

SARA 313

Form R – Reporting requirements

Product Name: Sulfuric Acid  
CAS Number: 7664-93-9  
Concentration: 10

Supplier notification

Product Name: Sulfuric Acid  
CAS Number: 7664-93-9  
Concentration: 10

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations:

Pennsylvania RTK: Sulfuric acid: (environmental hazard, generic environmental hazard)  
Massachusetts RTK: Sulfuric Acid  
New Jersey: Sulfuric Acid 10%  
WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Ingredient name: Sulfuric Acid  
Cancer: Yes  
Reproductive: No  
No significant risk level: No  
Maximum acceptable dosage level: No  
Canada

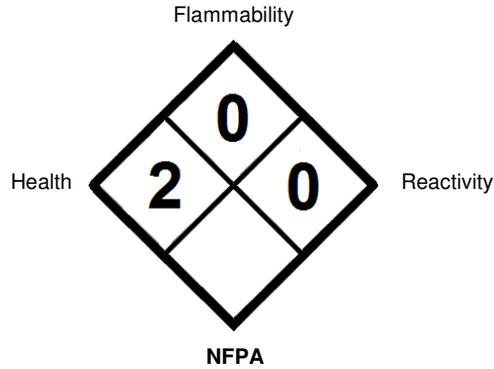
WHMIS (Canada):

Class D-1A: Material causing immediate and serious toxic effects (Very toxic)  
Class E: Corrosive material  
CEPA DSL/CEPA NDSL: CEPA NDSL: CEPA DSL: Sulfuric Acid: Water

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

**SECTION 16**

**Additional Information**



**Revisions**

07/11/2012	0	Review date for MSDS.stn
------------	---	--------------------------

The information herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty either expressed or implied is made for the completeness or accuracy of the information whether originating from the above mentioned company or not. Users of this material should satisfy themselves by independent investigation of current scientific and medical knowledge that the material can be used safely.