

# SAFETY DATA SHEET

Issue Date 11-Nov-2015 Revision Date 14-Sept-2020 Version 2

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name SULFURIC ACID, 66° Be' FCC

Other means of identification

Product Code H2SO4 FCC UN/ID No. UN1830 Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Acid.

Uses advised against PREVENT DISPERSION OF MISTS!

**Manufacturer Address** 

Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number

Chemtrec 1-800-424-9300

# 2. HAZARDS IDENTIFICATION

### Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

### Label elements

#### **Emergency Overview**

## Danger

### Hazard statements

Fatal if inhaled

Causes severe skin burns and eye damage

May be corrosive to metals



Appearance aqueous solution

Physical state liquid

Odor None

### **Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray Wear respiratory protection Wash face, hands and any exposed skin thoroughly after handling Keep only in original container

Use only in well-ventilated areas

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

#### **Precautionary Statements - Response**

Specific treatment is urgent (see Section 4 on this label) Immediately call a POISON CENTER or doctor/physician

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

Absorb spillage to prevent material damage

### **Precautionary Statements - Storage**

Store locked up

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

Store in a corrosive resistant container.

### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

## Hazards not otherwise classified (HNOC)

Other Information

· May be harmful if swallowed

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Sulfuric acid	7664-93-9	93	

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret.

# 4. FIRST AID MEASURES

### First aid measures

General advice Immediate medical attention is required.

Eye contact Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete

rinsing. Get immediate medical attention.

**Skin Contact** Flush with water for 15 minutes. Get medical attention. Remove contaminated clothing and

wash before reuse.

**Inhalation** Remove victim from immediate source of exposure to fresh air. If breathing is difficult,

administer oxygen if available. If victim is not breathing, administer CPR. If individual experiences nausea, headache, or dizziness, get immediate medical attention.

**Ingestion** Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate

medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing

or unconscious person.

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

**Symptoms** Causes severe irritation and or burns.

# Indication of any immediate medical attention and special treatment needed

Note to physicians

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Dry chemical. Carbon dioxide (CO2).

Unsuitable extinguishing media DO NOT USE WATER.

#### Specific hazards arising from the chemical

Direct contact with water can cause a violent exothermic reaction. Contact with metals may evolve flammable hydrogen gas.

#### **Explosion data**

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

#### Protective equipment and precautions 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 Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection

equipment.

**Environmental precautions** See Section 12 for additional ecological information.

Methods for containment Stop leak if you can do it without risk. Completely contain spilled material with dikes or sand

bags, etc.

Methods for cleaning up Recover as much material as possible into containers for disposal or reuse. Remaining

material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal.

### 7. HANDLING AND STORAGE

### Precautions for safe handling

Advice on safe handling Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest.

Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate ventilation. NEVER add water to product. ALWAYS add product, with constant stirring,

slowly to surface of water to minimize heat generation and spattering.

# Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed and properly labeled. Containers that have been emptied will

retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or

consume foods, beverages, tobacco in areas where this product is stored.

Incompatible materials Water. Alkalis. Metals, metal powders such as aluminum, zinc, tin, etc. Strong oxidizing

agents (hypochlorites). Reducing agents. Chlorates. Fulminates. Nitrates. Picrates. Cyanides. Sulfides. Carbides. Organic materials. Combustible material.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfuric acid	TWA: 0.2 mg/m³ thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9	-	(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

### **Appropriate engineering controls**

Showers

Eyewash stations Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear protective splash proof safety goggles. Additional full face protection is recommended

if splashing is a possibility.

**Skin and body protection**Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state liquid

Appearanceaqueous solutionOdorNone

Colorclear colorlessOdor thresholdNo information available

Property Values Remarks • Method

No information available

**pH** <1

Melting point/freezing point
Boiling point / boiling range
Flash point
Evaporation rate

No information available
No information available
No information available

Flammability (solid, gas)

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available

Specific Gravity 1.835

Water solubility Soluble in water

Solubility in other solvents No information available No information available **Partition coefficient Autoignition temperature** No information available **Decomposition temperature** No information available Kinematic viscosity No information available **Dvnamic viscosity** No information available **Explosive properties** No information available **Oxidizing properties** No information available

### **Other Information**

Softening point
Molecular weight
VOC Content (%)
Density
No information available

# 10. STABILITY AND REACTIVITY

#### Reactivity

No data available

### **Chemical stability**

Stable under recommended storage conditions.

### **Possibility of Hazardous Reactions**

None under normal processing.

#### Conditions to avoid

Incompatible materials. Contact with water may cause violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product.

#### Incompatible materials

Water. Alkalis. Metals, metal powders such as aluminum, zinc, tin, etc. Strong oxidizing agents (hypochlorites). Reducing agents. Chlorates. Fulminates. Nitrates. Picrates. Cyanides. Sulfides. Carbides. Organic materials. Combustible material.

### **Hazardous Decomposition Products**

Oxides of sulfur.

# 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Product Information No data available

**Inhalation** May be harmful by inhalation.

Eye contact Corrosive to the eyes and may cause severe damage including blindness.

**Skin Contact** Contact causes severe skin irritation and possible burns.

**Ingestion** No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid	= 2140 mg/kg (Rat)	-	= 510 mg/m <sup>3</sup> (Rat) 2 h
7664-93-9			

#### Information on toxicological effects

Symptoms No information available.

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

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulfuric acid	A2	Group 1	Known	X
7664-93-9		•		

Reproductive toxicity
STOT - single exposure
No information available.
No information available.

STOT - repeated exposure
Aspiration hazard
No information available.
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 2301 mg/kg ATEmix (inhalation-dust/mist) 0.3 mg/l

# 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sulfuric acid	-	500: 96 h Brachydanio rerio mg/L	29: 24 h Daphnia magna mg/L
7664-93-9		LC50 static	EC50

### Persistence and degradability

No information available.

#### Bioaccumulation

No information available.

Other adverse effects No information available

# 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

Chemical Name	California Hazardous Waste Status
Sulfuric acid	Toxic
7664-93-9	Corrosive

# 14. TRANSPORT INFORMATION

DOT Regulated
UN/ID No. UN1830
Proper shipping name Sulfuric Acid

Hazard Class 8
Packing Group ||

# 15. REGULATORY INFORMATION

**International Inventories** 

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Does not comply

IECSCCompliesKECLCompliesPICCSCompliesAICSComplies

### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical which is subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	Percent by Weight
Sulfuric acid - 7664-93-9	93

### SARA 311/312 Hazards

Corrosive to metal

Acute toxicity - Inhalation (Dusts/Mists)

Serious eye damage or eye irritation

Skin corrosion or irritation

### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric acid 7664-93-9	1000 lb	-	-	Χ

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sulfuric acid	1000 lb	1000 lb	RQ 1000 lb final RQ
7664-93-9			RQ 454 kg final RQ

### **US State Regulations**

### **California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical Name	California Proposition 65
Sulfuric acid - 7664-93-9	Carcinogen

### **U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sulfuric acid	X	X	X
7664-93-9			

### U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

# **16. OTHER INFORMATION**

NFPA Health hazards 3 Flammability 0 Instability 2 Physical and Chemical

Properties -

HMIS Health hazards 3 Flammability 0 Physical hazards 2 Personal protection X

Prepared By Imt

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**Revision Note** 

14-Sept-2020-Updated Section 15

#### **Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**