

# **Safety Data Sheet**

Issue Date: 8/24/2014 Revision Date: 4/7/2022 Version No.: 2.0

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Sulfuric Acid, Less than 51% (1% to 51%)

SDS No.: CCC-005

**UN/ID No.:** UN2796

Recommended use of the chemical and restrictions on use: For industrial use.

Company Name & Address: Colonial Chemical Company

78 Carranza Road Tabernacle, NJ 08088

For More Information Call: 1-609-268-1200 (Monday-Friday 8:00-4:30)

In Case of Emergency Call: INFOTRAC 1-800-535-5053 (North America)

1-352-323-3500 (International)

#### 2. HAZARDS IDENTIFICATION

OSHA Hazards: Not classified Target Organs: Skin, eyes

Signal Words: Danger

**Pictograms:** 



#### **GHS Classification:**

Skin Corrosion/irritation	Category 1, Subcategory B
Serious eye damage/eye irritation	Category 1

## GHS Label Elements, including precautionary statements:

#### **Hazard Statements:**

Causes severe skin burns and eye damage

#### **Precautionary Statements:**

Prevention	
P260	Do not breathe dust/fume/gas/mist/vapors/spray
P271	Use only outdoors or in a well-ventilated area
P284	Wear respiratory protection
P264	Wash face, hands and any exposed skin thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection

Response		
P305+P351+P338+P310	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	
P303+P361+P353+P363	3   IF ON SKIN (or hair): Remove/Take off immediately all	
	contaminated clothing. Rinse skin with water/shower wash	
	contaminated clothing before reuse	
P304+P340+P310	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	
P301+P330+P331+P310	0 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a	
	poison center or doctor/physician	
Storage		
P403+P233	Store in a well-ventilated place. Keep container tightly closed	
P405	Store locked up	
Disposal		
P501	Dispose of contents/container to an approved waste disposal plant	

## Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

**NFPA Ratings** 

Health	3
Flammability	0
Reactivity	2
Specific hazard	W

**HMIS Ratings** 

Health	3
Fire	0
Reactivity	2
Personal	Not determined

0=minimal 1=slight 2=moderate 3=serious 4=severe

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#
Sulfuric Acid	1-51	7664-93-9

<sup>\*</sup>Chemicals listed are only those ingredients which are not trade secrets, are classified as health hazards and are present above their concentration limits.

## 4. FIRST-AID MEASURES

General	Provide this SDS to medical personnel for treatment
Eyes	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.
Skin	In case of contact, immediately (within seconds) flush skin with plenty of cold water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. While the patient is being transported to a medical facility apply compresses of iced water. If medical treatment must be delayed, immerse the affected area in iced water or apply compresses of iced water to affected areas. Do not freeze tissue.
Ingestion	If swallowed, do not induce vomiting except at the direction of medical personnel. Rinse mouth. Drink 1 or 2 glasses of water. Get medical attention immediately.

#### Most important symptoms and effects

**Symptoms** Causes severe skin burns and eye damage. May cause irritation to the

mucous membranes and upper respiratory tract. Irritation and corrosive

burns to mouth, throat, and stomach.

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

Notes to Physician Continued washing of the affected area with cold or iced water will be

helpful in removing the last traces of sulfuric acid. Creams or ointments should not be applied before or during the washing phase of treatment.

#### 5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable)	Use extinguishing measures that are appropriate to local	
extinguishing media	circumstances and the surrounding environment.	
	Unsuitable extinguishing media not determined	
Special protective equipment	As in any fire, wear self-contained breathing apparatus pressure-	
and precautions for firefighters	demand, MSHA/NIOSH (approved or equivalent) and full protective	
	gear.	
Specific hazards arising from the	Product is not flammable or combustible. Reacts with most metals,	
chemical	especially when dilute, to give flammable, potentially explosive	
	hydrogen gas.	
<b>Hazardous Combustion Products</b>	Carbon oxides	

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and	Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate affected area.
emergency procedures	
Environmental precautions	Prevent from entering into soil, ditches, sewers, waterways and/or
	groundwater. See Section 12, Ecological Information.
Methods and materials for	Prevent further leakage or spillage if safe to do so. Soak up and contain
containment	spill with an inert (i.e. vermiculite, dry sand or earth) absorbent material.
Methods and materials for	Sweep up absorbed material and shovel into suitable containers for
clean up	disposal. Discard any product, residue, disposable container or liner in full
	compliance with federal, state, and local regulations. For waste disposal,
	see section 13 of the SDS.
Secondary Hazards	Material can create slippery conditions.

#### 7. HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Follow all SDS/label precautions even after container is emptied, because it may retain product residues. Do not breathe vapors or spray mist. Do not eat, drink or smoke when handling this product. Use only with adequate ventilation. Wear respiratory protection. Loosen closure carefully; relieve internal pressure when received and at least weekly thereafter. Do not use pressure to empty. Do not wash out container or use it for other purposes. Replace closure after each use.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated	
_	place. Store away from incompatible materials. Store locked up.	
Packaging Materials	Empty containers retain product residue and can be hazardous.	
Incompatible Materials	Vigorous reactions with water; alkaline solutions; metals, metal powder; carbides; chlorates; nitrates; strong oxidizing, reducing, or combustible organic materials. Hazardous gases are evolved on contact with chemicals such as cyanides, sulfides, and carbides.	

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Sulfuric Acid	0.2 mg/m <sup>3</sup>	TWA	ACGIH TLV
7664-93-9	1 mg/m <sup>3</sup> (vacated)	TWA	OSHA PEL
	1 mg/m <sup>3</sup>	TWA	OSHA PEL
	15 mg/m <sup>3</sup>	IDLH	NIOSH
	1 mg/m <sup>3</sup>	TWA	NIOSH

TWA: Time Weighted Average over 8 hours of work.

PEL: Permissible Exposure Limit

IDLH: Immediately Dangerous to Life or Health

## **Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

Eyewash stations. Showers.

## **Personal Protection**

Eyes	Use chemical safety goggles and/or a full-face shield where splashing is possible	
Inhalation	If the exposure limit is exceeded and engineering controls are not feasible, a full-	
	face respirator with an acid gas cartridge and particulate filter (NIOSH type N100	
	filter) may be worn up to 50 times the exposure limit, or the maximum use	
	concentration specified by the appropriate regulatory agency or respirator supplier,	
	whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.)	
	are present, use a NIOSH type R or P particulate filter. For emergencies or	
	instances where the exposure levels are not known, use a full-face shield positive-	
	pressure, air-supplied respirator. WARNING: Air purifying respirators do not	
	protect workers in oxygen-deficient atmospheres. Where respirators are required,	
	you must have a written program covering the basic requirements in the OSHA	
	respirator standard. These include training, fit testing, medical approval, cleaning,	
	maintenance, cartridge change schedules, etc. See 29CFR1910.134 for details.	
Skin & Body	Wear impervious protective clothing, including boots, gloves, lab coat, apron or	
	coveralls, as appropriate, to prevent skin contact.	
General Hygiene	Avoid contact with skin, eyes and clothing. After handling this product, wash hands	
	before eating, drinking, or smoking. If contact occurs, remove contaminated	
	clothing. If needed, take first aid action shown on section 4 of this SDS. Launder	
	contaminated clothing before reuse.	

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear Liquid
Odor	Slightly acrid
рН	< 1.0
Specific gravity	1.058-1.409 @ 60°F
Freezing point	10%wt - (25°F)
	51%wt - (-30°F)
Boiling point	10%wt - (210°F)
	51%wt - (270°F)
Flash point	Will not burn, non-flammable
Flammability (solid, gas)	Liquid-not applicable
Upper/lower flammability or explosive limit	Not determined
Vapor pressure	< 0.3 mmHg @ 25°C (77°F)
Vapor density	3.4 (Air=1)
Solubility	Completely soluble in water
Evaporation Rate	< 1.0
Dynamic Viscosity	20°C 25 mPas
	0°C 60 mPas

## **10. STABILITY AND REACTIVITY**

Reactivity	Not reactive under normal conditions. Will react with water or steam to produce toxic and corrosive fumes. Reacts with carbonates to generate carbon dioxide gas, and with cyanides and sulfides to form poisonous hydrogen cyanide and hydrogen sulfide respectively
Chemical Stability	Stable under ordinary conditions of use and storage.  Concentrated solutions react violently with water, spattering and liberating heat.
Possibility of Hazardous Reactions	None under normal processing
Conditions to Avoid	Avoid heat, sparks, open flames and other ignition sources. Heat, moisture, incompatibles. Keep separated from incompatible substances.
Incompatible Materials	Vigorous reactions with water; alkaline solutions; metals, metal powder; carbides; chlorates; nitrates; strong oxidizing, reducing, or combustible organic materials. Hazardous gases are evolved on contact with chemicals such as cyanides, sulfides, and carbides.
Hazardous Decomposition Products	Releases sulfur dioxide at extremely high temperatures. Toxic fumes of oxides of sulfur when heated to decomposition.
Hazardous Polymerization	Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

## **Acute Toxicity**

Skin	Causes severe skin burns	
Eyes	Causes severe eye damage	
Respiratory	May cause irritation to the mucous membranes and upper respiratory tract.	
Ingestion	May be harmful if swallowed.	

**Component Information** 

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 physical, chemical and toxicological effects

#### **Symptoms**

Please see section 4 of this SDS for symptoms.

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

#### Carcinogenicity

IARC has classified "strong inorganic acid mist containing sulfuric acid" as a Category 1 carcinogen, substance that is carcinogenic to humans. This classification does not apply to liquid forms of sulfuric acid. Inorganic mist is not generated under normal use of this product.

IARC	Group 1	Carcinogenic to Humans	
ACGIH	A2	Suspected Human Carcinogen	
NTP	Known	Known Carcinogen	
OSHA	X	Present	

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)

Signs & Symptoms of Exposure

Skin	Causes severe skin burns	
Eyes	Causes severe eye damage	
Respiratory	May cause irritation to the mucous membranes and upper respiratory tract.	
Ingestion	Irritation and corrosive burns to mouth, throat, and stomach.	

Chronic Toxicity	Chronic inhalation may be harmful	
Mutagenicity	No data available to indicate product or any components present are mutagenic or genotoxic	
Specific Target Organ Toxicity	May cause respiratory irritation	
Reproductive Toxicity	This product is no expected to cause reproductive or developmental effects	
Respiratory/Skin Sensitization	Not a respiratory or skin sensitizer	

## 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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

Persistence and Degradability	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.
Bioaccumulative Potential	Not determined.
Mobility in Soil	Not determined
Other Adverse Effects	Not determined

## 13. DISPOSAL CONSIDERATIONS

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

## **California Hazardous Waste Status**

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

## 14. TRANSPORTATION INFORMATION

	<u> </u>
<u>US DOT</u>	
UN/ID No	UN2796
Proper Shipping Name	Sulfuric acid
Hazard Class	8
Packing Group	
Reportable Quantity (RQ)	1000 lbs
IATA	
UN/ID No	UN2796
Proper Shipping Name	Sulfuric acid
Hazard Class	
Packing Group	
IMDG	
UN/ID No	UN2796
Proper Shipping Name	Sulfuric acid
Hazard Class	
Packing Group	

#### 15. REGULATORY INFORMATION

## **International**

#### **Inventories**

TSCA Listed

**DSL** Listed

NDSL Listed

**EINECS** Listed

**ELINCS** Listed

**ENCS** Listed

KECL Listed

PICCS Listed

AICS Listed

#### 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

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**

#### **CERCLA**

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	1000 lb	1000 ib	RQ 454 kg final RQ

## SARA 311/312 Hazard Categories

Acute Health Hazard Yes

Chronic Health Hazard Yes

Fire Hazard No

Sudden Release of Pressure Hazard No

Reactive Hazard Yes

#### **SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Sulfuric Acid - 7664-93-9	7664-93-9	1-51	1.0

#### **CWA (Clean**

## Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric Acid	1000 lb			Х
7664-93-9 ( 1-51 )				

#### **US State Regulations**

#### **California Proposition 65**

This product contains the following 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 7664-93-9	X	X	X

## **16. OTHER INFORMATION**

Revision	Date
Formatting & precautionary statements updated	4/7/2022

Disclaimer: We believe that the information herein is factual but is not intended to be all inclusive. The information relates only to the specific material designated and does not relate to its use in combination with other materials or its use as to any particular process. Because safety standards and regulations are subject to change and because we have no continuing control over the material, those handling, storing or using the material should satisfy themselves that they have current information regarding the particular way the material is handled, stored or used and that the same is done in accordance with federal, state and local law. WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE.