

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name: Sulfuric Acid 93%  
CAS number: 7664-93-9  
Synonyms: Sulphuric Acid

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: Process chemical, laboratory and scientific research and development.

#### 1.3 Details of the supplier of the safety data sheet

Company : Lab Alley, LLC  
22111 Highway 71 West, Suite 601  
Spicewood, Texas 78669  
U.S.A.

Telephone : 512-668-9918  
Fax : 512-886-4008

#### 1.4 Emergency telephone

**Emergency Phone #** : US & Canada: 1-800-535-5053 INFOTRAC  
International 1-352-323-3500 INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion/irritation (Category 1)  
Serious eye damage/eye irritation (Category 1)

## 2.2 GHS Label elements, including precautionary statements

Pictogram:



Signal Word:

**Danger**

Hazard statement(s):

Causes severe skin burns and eye damage. Causes serious eye damage.

Precautionary statement(s):

**Prevention** - Do not breathe mist or vapors. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection.  
**Response** - If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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/doctor. Wash contaminated clothing before reuse. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

### Hazards not otherwise classified

None known.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Ingredient	CAS Number	Percent	Hazardous Chemical
Sulfuric Acid	7664-93-9	93%	Yes
Other components below reportable levels		7%	

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice:**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled:**

Move to fresh air. Call a physician if symptoms develop or persist.

**In case of skin contact:**

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

**In case of eye contact:**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

**In case of ingestion:**

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**4.2 Most important symptoms and effects, both acute and delayed**

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**4.3 Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable (and unsuitable) extinguishing media**

Foam. Powder. Carbon dioxide (CO<sub>2</sub>).  
Do not use water jet as an extinguisher, as this will spread the fire.

**5.2 Specific hazards arising from the substance or mixture**

During fire, gases hazardous to health may be formed.

**5.3 Special protective equipment and precautions for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials. No unusual fire or explosion hazards noted.

**5.4 Further information**

No data available.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**6.2 Environmental precautions**

Avoid discharge into drains, water courses or onto the ground.

**6.3 Methods and materials for containment and cleaning up**

This product is miscible in water. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

## 6.4 Reference to other sections

For disposal see Section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Respiratory protection is "only required" when sprays are present in the air.

#### Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SOS).

## SECTION 8. Exposure controls/personal protection

### 8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Material  
Type

Value

SULPHURIC ACID	PEL	1 mg/m <sup>3</sup>
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US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)  
Components Type

Value

SULFURIC ACID (CAS 7664-93-9)	PEL	1 mg/m <sup>3</sup>
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US. ACGIH Threshold Limit Values  
Material

Type

Value

Form

SULPHURIC ACID	TWA	0.2 mg/m <sup>3</sup>	Thoracic fraction.
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Components

Type

Value

Form

SULFURIC ACID (CAS 7664-93-9)	TWA	0.2 mg/m <sup>3</sup>	Thoracic fraction.
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US. NIOSH: Pocket Guide to Chemical Hazards  
Material

Type

Value

SULPHURIC ACID	TWA	1 mg/m <sup>3</sup>
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Components

Type

Value

SULFURIC ACID (CAS 7664-93-9)	TWA	1 mg/m <sup>3</sup>
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### 8.2 Exposure controls

#### Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

## Personal protective equipment

### Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

### Skin and body protection

Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing.  
Wear appropriate thermal protective clothing, when necessary.

### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

### Control of environmental exposure

Avoid discharge into drains, water courses or onto the ground.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Liquid.
Appearance	Clear to light yellow.
Odor	Odorless
Odor Thresh	Not available.
pH	0
Melting Point/Range	-31 °F (-35 °C)
Boiling Point/Range	530.06 °F (276.7 °C) estimated. 554 °F (290 °C).
Flash Point	Not available.
Evaporation Rate	Not available.
Flammability (solid, gas)	Not applicable.
Flammability or explosive limit	
	Upper : NA
	Lower : NA
Vapor Pressure	0.000008 kPa at 25 °C
Vapor Density	3.4
Density	Not available.
Solubility	Miscible.
Partition coefficient; n-octanol/water	Not available
Autoignition Temp	Not available.
Decomposition Temp	Not available.
Viscosity	Not available.
Molecular Formula	H2SO4
Molecular Weight	98.08
VOC Content(%)	No data available.
Oxidizing properties	None.

## 9.2 Other safety information

None.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

### 10.2 Chemical stability

Material is stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

### 10.4 Conditions to avoid

Contact with incompatible materials.

### 10.5 Incompatible materials

Strong oxidizing agents.

### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Not known.

#### Skin corrosion/irritation

Causes severe skin burns and eye damage

#### Serious eye damage/eye irritation

Causes serious eye damage.

#### Respiratory or skin sensitization

Due to partial or complete lack of data the classification is not possible.

#### Germ cell mutagenicity

Due to partial or complete lack of data the classification is not possible.

#### Carcinogenicity

Due to partial or complete lack of data the classification is not possible.

##### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

##### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

##### US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

### Reproductive toxicity

Due to partial or complete lack of data the classification is not possible.

### Specific target organ toxicity - single exposure

Due to partial or complete lack of data the classification is not possible.

### Specific target organ toxicity - repeated exposure

Due to partial or complete lack of data the classification is not possible.

### Aspiration hazard

Due to partial or complete lack of data the classification is not possible.

### Chronic effects

Prolonged inhalation may be harmful.

## 11.2 Additional information

None.

## SECTION 12. Ecological information

### 12.1 Toxicity

**Ecotoxicity:** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
SULFURIC ACID (CAS 7664-93-9)			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia magna	> 100 mg/l, 48 hours
		Aesop shrimp (Pandalus montagui)	42.5 mg/l, 48 hours 200-
	LC50	Cockle (Cerastoderma edule)	500 mg/l, 48 hours
		Common shrimp, sand shrimp (Crangon crangon)	70-80 mg/l, 48 hours
		Green or European shore crab (Carcinus maenas)	70-80 mg/l, 48 hours
Fish	LC50	Starry, european flounder (Platichthys flesus)	100- 330 mg/l, 48 hours
		Western mosquitofish (Gambusia affinis)	42 mg/l, 24 hours 42 mg/l, 48 hours 42 mg/l, 96 hours

### 12.2 Persistence and Degradability

No data is available on the degradability of this product.

### 12.3 Bioaccumulative Potential

No data available.

### 12.4 Mobility in Soil

No data available.

## 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## 12.6 Endocrine disrupting properties

No data available.

## 12.7 Other adverse effects

None known.

# SECTION 13. Disposal considerations

## 13.1 Waste Disposal Methods

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations. D002: Waste Corrosive material [pH  $\leq 2$  or  $\geq 12.5$ , or corrosive to steel]. The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

# SECTION 14: Transport information

### DOT

<b>UN-No</b>	UN1830
<b>Proper Shipping Name</b>	Sulfuric Acid
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

### IATA

<b>UN-No</b>	UN1830
<b>Proper Shipping Name</b>	Sulfuric Acid
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

### IMDG

<b>UN-No</b>	UN1830
<b>Proper Shipping Name</b>	Sulphuric Acid with more than 51% acid solution (SULFURIC ACID)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

# SECTION 15: Regulatory information

<b>US federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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### Toxic Substances Control Act (TSCA)

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**



SULFURIC ACID (CAS 7664-93-9) Listed.  
**SARA 304 Emergency release notification**  
 SULFURIC ACID (CAS 7664-93-9) 1000 LBS  
**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
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SULFURIC ACID	7664-93-9	1000	1000		
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**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Skin corrosion or irritation  
 Serious eye damage or eye irritation

**SARA 313 (TRI reporting)**

Chemical name	CAS number	%by wt.
SULFURIC ACID	7664-93-9	93

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)** Hazardous substance

**Safe Drinking Water Act (SOWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

SULFURIC ACID (CAS 7664-93-9)	6552
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**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

SULFURIC ACID (CAS 7664-93-9)	20 %WV
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**DEA Exempt Chemical Mixtures Code Number**

SULFURIC ACID (CAS 7664-93-9)	6552
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**Food and Drug Administration (FDA)** Total food additive  
 Direct food additive  
 GRAS food additive

**US state regulations**

**California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

SULFURIC ACID (CAS 7664-93-9)

**International Inventories:**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes

**SECTION 16: Other information**

Issue Date 06/05/2015  
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**Disclaimer:**

The information provided on this 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.