

HERITAGE  
SYSTEMS



Delivering  
Liquid Solutions

HERITAGE SYSTEMS  
2471 Solano Ave., STE 141  
Napa, CA 94558  
707-258-0553

## SAFETY DATA SHEET

### 1. Identification

**Product identifier:** - SULFURIC ACID 1-51%

**Other means of identification**

**SDS number:** 000100000005

**Recommended use and restriction on use**

**Recommended use:** Not available.

**Restrictions on use:** Not known.

**Emergency telephone number:**For emergency assistance Involving chemicals

**Infotrac Emergency Number:** 800-535-5053

### 2. Hazard(s) identification

**Hazard classification**

**Health hazards**

Skin corrosion/irritation Category 1A

Serious eye damage/eye irritation Category 1

Carcinogenicity Category 1A

**Environmental hazards**Acute hazards to the aquatic environment Category 3

**Label elements**

**Hazard symbol**





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<b>Signal word</b>	Danger
<b>Hazard statement</b>	Corrosive. Harmful or fatal if swallowed. Causes severe skin burns and eye damage. May be corrosive to metals. May cause cancer. Harmful to aquatic life.
<b>Precautionary statement</b>	
<b>Prevention</b>	Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
<b>Response</b>	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. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.
<b>Storage</b>	Store in a closed container. Store in a well-ventilated place. Store in a dry place. Store locked up.
<b>Disposal</b>	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.



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Other hazards which do not result in GHS classification None.

### 3. Composition/information on ingredients

#### Substances

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
Water		7732-18-5	>=49 - <=99%
Sulfuric Acid		7664-93-9	>=1 - <=51%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

**Ingestion:** Call a physician or poison control center immediately. DO NOT induce vomiting. Get medical attention immediately. Never give liquid to an unconscious person.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. Perform artificial respiration if breathing has stopped.

**Skin contact:** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Eye contact:** If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** No data available.

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

**Treatment:** No data available.

### 5. Fire-fighting measures

**General fire hazards:** Material reacts with water.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Do not use water as an extinguisher. Use: Carbon dioxide or dry powder.

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<b>Unsuitable extinguishing media:</b>	No data available.
<b>Specific hazards arising from the chemical:</b>	Material reacts with water.
<b>Special protective equipment and precautions for firefighters</b>	
<b>Special fire fighting procedures:</b>	No unusual fire or explosion hazards noted.
<b>Special protective equipment for fire-fighters:</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures:</b>	Use personal protective equipment.
<b>Methods and material for containment and cleaning up:</b>	Absorb spillage with non-combustible, absorbent material. Dike for later disposal.

#### 7. Handling and storage

<b>Precautions for safe handling:</b>	Use personal protective equipment as required. Keep away from any possible contact with water, because of violent reaction and possible flash fire. Store away from incompatible materials. Use only with adequate ventilation. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures.
<b>Conditions for safe storage, including any incompatibilities:</b>	Keep container tightly closed. Store in a well-ventilated place.

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**8. Exposure controls/personal protection**

**Control parameters**

**Occupational exposure limits**

Chemical identity	Type	Exposure Limit values	Source
Sulfuric Acid - Thoracic fraction.	TWA	0.2 mg/m3	US. ACGIH Threshold Limit Values (03 2013)
Sulfuric Acid	REL	1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	1 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	1 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	1 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA PEL	0.1 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	STEL	3 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)

**Appropriate engineering controls**

Adequate ventilation should be provided so that exposure limits are not exceeded. Provide eyewash station and safety shower.

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

**General information:**

Use personal protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Practice good housekeeping. Provide eyewash station and safety shower.

**Eye/face protection:**

Use safety goggles and face shield in case of splash risk. Wear approved safety goggles.

**Skin protection**

**Hand protection:**

Wear chemical-resistant gloves. Contact glove manufacturer for specific information. Wear necessary protective equipment.

**Other:**

No data available.

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**Respiratory protection:** Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

**Hygiene measures:** Do not eat, drink or smoke when using the product. Observe good industrial hygiene practices.

### 9. Physical and chemical properties

**Physical state:** Liquid

**Form:** No data available.

**Color:** No data available.

**Odor:** No data available.

**Odor threshold:** No data available.

**pH:** 1

**Melting point/freezing point:** -32 °C

**Initial boiling point and boiling range:** 276 °C

**Flash Point:** No data available.

**Evaporation rate:** No data available.

**Flammability (solid, gas):** No data available.

**Upper/lower limit on flammability or explosive limits**

**Flammability limit - upper (%):** No data available.

**Flammability limit - lower (%):** No data available.

**Explosive limit - upper (%):** No data available.

**Explosive limit - lower (%):** No data available.

**Vapor pressure:** No data available.

**Vapor density:** No data available.

**Relative density:** No data available.

**Solubility(ies)**

**Solubility in water:** No data available.

**Solubility (other):** No data available.

**Partition coefficient (n-octanol/water):** No data available.

**Auto-ignition temperature:** No data available.

**Decomposition temperature:** No data available.

**Viscosity:** No data available.

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## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical stability:</b>	No data available.
<b>Possibility of hazardous reactions:</b>	Material is stable under normal conditions.
<b>Conditions to avoid:</b>	No data available.
<b>Incompatible materials:</b>	Water. Strong reducing agents. Strong bases. Metals.
<b>Hazardous decomposition products:</b>	No data available.

## 11. Toxicological information

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Ingestion:</b>	No data available.
<b>Inhalation:</b>	No data available.
<b>Skin contact:</b>	No data available.
<b>Eye contact:</b>	No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

##### Oral

**Product:** ATEmix ( ): 2,140 mg/kg

##### Dermal

**Product:** No data available.

##### Inhalation

**Product:** No data available.

#### Specified substance(s):

Sulfuric Acid LC 50 (Rat, ) : 375 mg/m3 (, No) 2 (reliable with restrictions)

#### Repeated dose toxicity

**Product:** No data available.

#### Skin corrosion/irritation

**Product:** No data available.

#### Serious eye damage/eye irritation

**Product:** No data available.

#### Respiratory or skin sensitization

**Product:** No data available.

#### Carcinogenicity

**Product:** No data available.

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**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Sulfuric Acid Overall evaluation: 1. Carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

Sulfuric Acid Known To Be Human Carcinogen.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ cell mutagenicity**

**In vitro**

**Product:** No data available.

**In vivo**

**Product:** No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specific target organ toxicity - single exposure**

**Product:** No data available.

**Specific target organ toxicity - repeated exposure**

**Product:** No data available.

**Aspiration hazard**

**Product:** No data available.

**Other effects:** No data available.

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Specified substance(s):**

Sulfuric Acid LC 50 (Western mosquitofish (*Gambusia affinis*), 96 h): 42 mg/l Mortality

**Aquatic invertebrates**

**Product:** No data available.

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**



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<b>Product:</b>	No data available.
<b>Persistence and degradability</b>	
<b>Biodegradation</b>	
<b>Product:</b>	No data available.
<b>BOD/COD ratio</b>	
<b>Product:</b>	No data available.
<b>Bioaccumulative potential</b>	
<b>Bioconcentration factor (BCF)</b>	
<b>Product:</b>	No data available.
<b>Partition coefficient n-octanol / water (log Kow)</b>	
<b>Product:</b>	No data available.
<b>Mobility in soil:</b>	No data available.
<b>Known or predicted distribution to environmental compartments</b>	
Water	No data available.
Sulphuric acid	No data available.
<b>Known or predicted distribution to environmental compartments</b>	
Sulphuric acid	No data available.

### 13. Disposal considerations

<b>Disposal instructions:</b>	All waste must be handled in accordance with Waste Act (No. 185/2001 Coll.), as amended, and related regulations, as amended.
<b>Contaminated packaging:</b>	No data available.

### 14. Transport information

#### DOT

UN number:	UN 2796
UN proper shipping name:	Sulfuric acid
Transport hazard class(es)	
Class:	8
Label(s):	8
Packing group:	II
Marine Pollutant:	Not regulated.
Special precautions for user:	-

### 15. Regulatory information



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**US federal regulations US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

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

Sulfuric Acid Reportable quantity: 1000 lbs.

**Superfund amendments and reauthorization act of 1986 (SARA)**

**Hazard categories**

Not listed.

**SARA 302 Extremely hazardous substance**

<b>Chemical identity</b>	<b>RQ</b>	<b>Threshold Planning Quantity</b>
Sulfuric Acid	1000 lbs.	1000 lbs.

**SARA 304 Emergency release notification**

<b>Chemical identity</b>	<b>RQ</b>
Sulfuric Acid	1000 lbs.

**SARA 311/312 Hazardous chemical**

<b>Chemical identity</b>	<b>Threshold Planning Quantity</b>
Sulfuric Acid	500lbs

**SARA 313 (TRI reporting)**

<b>Chemical identity</b>	<b>Reporting threshold for other users</b>	<b>Reporting threshold for manufacturing and processing</b>
Sulfuric Acid	10000 lbs	25000 lbs.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

Sulfuric Acid Reportable quantity: 1000 lbs.

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

Sulfuric Acid Threshold quantity: 10000 lbs

**US state regulations**

**US. California Proposition 65**

Sulfuric Acid Carcinogenic.  
Sulfuric Acid Carcinogenic.

**US. New Jersey Worker and Community Right-to-Know Act**

Sulfuric Acid Listed

**US. Massachusetts RTK - Substance List**

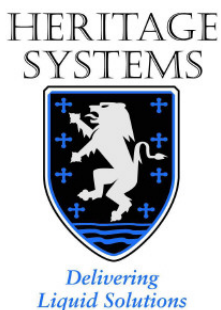
Sulfuric Acid Listed

**US. Pennsylvania RTK - Hazardous Substances**

Sulfuric Acid Listed

**US. Rhode Island RTK**

Sulfuric Acid Listed



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<b>Inventory Status:</b> Australia AICS:	Not in compliance with the inventory.
Canada DSL Inventory List:	Not in compliance with the inventory.
EU EINECS List:	Not in compliance with the inventory.
EU ELINCS List:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
EU No Longer Polymers List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	Not in compliance with the inventory.
New Zealand Inventory of Chemicals:	Not in compliance with the inventory.
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory

**16. Other information, including date of preparation or last revision**

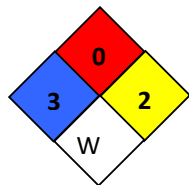
**HMIS Hazard ID**

<b>Health</b>	*	3
<b>Flammability</b>	0	
<b>Physical hazards</b>	2	
<b>PERSONAL PROTECTION</b>		K

K - Hood, Gloves, Protective Suit & Boots

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; \*Chronic health effect

**NFPA Hazard ID**



	Flammability
	Health
	Reactivity
	Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe  
 W: Water-reactive

**Issue date:** 05/08/2015  
**Revision date:** No data available.  
**Version #:** 1.8  
**Further information:** No data available.

## Heritage Systems, Inc. - Material Safety Data Sheet

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For Additional Information contact MSDS Coordinator during business hours, Pacific time: (707) 258-0553

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