

Safety DATA SHEET



1. IDENTIFICATION

Product identifier

Product Name Sulfuric Acid, 50% v/v (1:1)

Best Sanitizers, Inc
PO Box 1360
Penn Valley, CA 95946
Toll Free: 888-225-3267

Other means of identification

Manufacturer number: SA7940-A

Recommended use and restriction on use

Recommended use: Laboratory chemicals

Restrictions on use: No further relevant information available.

Manufacturer/Supplier:

AquaPhoenix Scientific, Inc.
860 Gitts Run Road Hanover, PA 17331
Phone: (717)632-1291
Toll-Free: (866)632-1291
info@aquaphoenixsci.com

Emergency telephone number

Emergency Phone Numbers ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

2. HAZARDS IDENTIFICATION

Classification

Skin Corrosion	H314 Causes severe skin burns and eye damage.	Category 1A
Serious eye damage/irritation	H318 Causes serious eye damage.	Category 1
Corrosive to metals	H290 May be corrosive to metals.	Category 1

Label elements

GHS label elements

The product is classified and labelled according to the Globally Harmonized System (GHS).

Signal word

Danger

Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.



Appearance Aqueous solution

Physical State Liquid

Odor Odorless

Precautionary Statements

Wear protective gloves/protective clothing/eye protection.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position 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.

Absorb spillage to prevent material damage.

Store locked up.

Store in corrosive resistant container /container with a corrosion resistant inner liner. Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards not otherwise classified (HNOC)

There are no other hazards not otherwise classified that have been identified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight %
Sulfuric Acid	7664-93-9	65%
Water	7732-18-5	35%

For the listed ingredient(s), the identity and/or exact percentages are being withheld as a trade secret. For the wording of the listed Hazard Statements refer to section 16.

4. FIRST AID MEASURES

First aid measures

Eye Contact

Protect unharmed eye.

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. Then consult a doctor.

Skin Contact

Immediately remove any clothing soiled by the product. Immediately rinse with water.

If skin irritation continues, consult a doctor.

Seek immediate medical help for blistering or open wounds.

Inhalation

Supply fresh air; consult doctor in case of complaints.

Ingestion

Rinse out mouth and then drink plenty of water.

Do NOT induce vomiting.

Call for medical help immediately.

Most important symptoms and effects, both acute and delayed

Strong caustic effect on skin and mucous membranes.

Gastric or intestinal disorders when ingested.

Eye damage.

Acidosis.

Hazards:

Danger of gastric perforation.

Causes serious eye damage.

Danger of impaired breathing.

Indication of any immediate medical attention and special treatment needed

Medical supervision for at least 48 hours.

If medical advice is needed, have product container or label at hand.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

The product is not flammable.

Use fire extinguishing methods suitable to surrounding conditions.

Unsuitable Extinguishing Media

None.

Specific Hazards Arising from the Chemical

During heating or in case of fire poisonous gases are produced.

Protective equipment and precautions for firefighters

Wear self-contained respiratory protective device.

Wear fully protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Personal Precautions

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

Environmental precautions

Environmental Precautions

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up

Methods for Containment and Cleaning Up

Use limestone to neutralize and/or absorb spill.
Clean the affected area carefully; suitable cleaners are:
Warm water
Dispose of the material collected according to regulations.

Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Avoid splashes or spray in enclosed areas.
Use only in well ventilated areas.
Avoid breathing mist/vapors/spray.
Avoid contact with the eyes and skin.
Open and handle receptacle with care.

Conditions for safe storage, including any incompatibilities

**Storage Conditions/
Incompatible materials** Store in cool, dry conditions in well-sealed receptacles.
Store only in the original receptacle.
Unsuitable material for receptacle: steel.
Unsuitable material for receptacle: aluminum.

**Information about storage in
one common storage facility:** Store away from foodstuffs.
Do not store together with alkalis (caustic solutions).
Store away from metals.

Specific end use(s): No further relevant information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	Limit values that require monitoring at the workplace
Sulfuric Acid 7664-93-9	PEL (USA): Long-term value: 1 mg/m ³ REL (USA): Long-term value: 1 mg/m ³ TLV (USA): Long-term value: 0.2* mg/m ³ *as thoracic fraction EL (Canada): Long-term value: 0.2 mg/m ³ ACGIH A2; IARC 1 EV (CANADA): Long-term value: 0.2 mg/m ³ LMPE (MEXICO): Long-term value: 0.2* mg/m ³ A2; *fracción torácica

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls

Engineering Controls Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses.

Skin and Body Protection Protective work clothing.
Protective gloves. The glove material must be impermeable and resistant to the product/ the substance/ the preparation.
Material of gloves:
Nitrile rubber, NBR
Neoprene gloves
Natural rubber, NR
Laminated film gloves.
Not suitable are gloves made of the following materials:
PVA gloves

Respiratory Protection Use suitable respiratory protective device when high concentrations are present.

Hygiene Measures The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages, and feed.

Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not inhale dust / smoke / mist.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid	Odor	Characteristic
Appearance	Aqueous solution	Odor Threshold	Not determined
Color	Clear, colorless	Remarks/ Method	
<u>Property</u>	<u>Values</u>		
pH – value at 20 °C (68 °F):	<2.0		
Melting/freezing point	Not determined		

Boiling point / boiling range	Not determined.
Flash Point	The product is not flammable.
Evaporation rate	Not Determined.
Flammability (solid, gas)	Not applicable.
Flammability Limits in Air	
Upper flammability limit	Not Determined.
Lower flammability limit	Not Determined.
Vapor pressure	Not Determined.
Vapor density	Not Determined.
Relative Density	1.4-1.5
Water Solubility	Soluble in water.
Partition coefficient:	No information available.
Autoignition temperature	Not Determined.
Decomposition temperature	Not Determined.
Kinematic viscosity	No information available.
Dynamic viscosity	No information available.

10. STABILITY AND REACTIVITY

Reactivity

No further relevant information available.

Chemical stability

Stable under normal temperatures and pressures.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of Hazardous Reactions

Toxic fumes may be released if heated above the decomposition point.

Corrosive action on metals.

Reacts with certain metals.

Reacts with alkali (lye).

Reacts with oxidizing agents.

Conditions to avoid

No further relevant information available.

Incompatible materials

Metals.

Alkalis.

Strong oxidizers such as perchlorates, bromates, and nitrates, hydrofluoric acid.

Hazardous Decomposition Products

Sulphur oxides (SO_x)

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification: None.

Primary irritant effect

Skin corrosion/irritation: Strong caustic effect on skin and mucous membranes.

Serious eye damage/irritation: Strong caustic effect.

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

NTP (National Toxicology Program): 7664-93-9 Sulfuric Acid

OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients are listed.

Probable routes of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

12. Ecological Data

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Rinse off bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. If the dilution of the use-level pH-value is considerably increased after use, the aqueous waste, emptied into drains, is only low water-dangerous.

Other adverse effects

No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation

Disposal should be in accordance with applicable regional, national, and local laws and regulations. Do not dispose together with household garbage. Do not allow product to reach sewage system or open water.

Uncleaned packaging

Recommendation

Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

UN-Number

DOT, ADR/RID/ADN, IMDG, IATA

UN1830

UN proper shipping name

DOT

Sulfuric acid

ADR/RID/ADN, IMDG

SULPHURIC ACID

IATA

Sulphuric acid

Transport hazard class(es)

DOT



Class: 8

Label: 8

ADR/RID/ADN



Class: 8 (C1)

Label: 8

IMDG, IATA



Class: 8 Label: 8

Packing group	II
DOT, ADR/RID/ADN, IMDG, IATA	II
Environmental hazards:	
Marine pollutant:	No.
Special precautions for user	Warning: Corrosive substances.
Danger code (Kemler):	80
EMS Number:	F-A, S-B
Segregation groups	Acids
Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
Transport/Additional information:	
ADR/RID/ADN	
• Transport category	2
• Tunnel restriction code	E

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	All ingredients are listed or exempt.
DSL/NDSL	None of the ingredients are listed.
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory	
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List	

U.S. Federal Regulations

SARA - Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Section 302 (extremely hazardous substances): None of the ingredients are listed.

Section 355 (extremely hazardous substances): 7664-93-9 Sulfuric Acid

Section 313 (Specific toxic chemical listings): 7664-93-9 Sulfuric Acid

US State Regulations

California Proposition 65

None of the ingredients are listed.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Prepared By Technical Department
Preparation/Revision Date January 1, 2025

General Disclaimer

The information provided in 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 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