



SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

PRODUCT IDENTIFIER: Sulfuric Acid Solution

PRODUCT CODE: Not specified

RECOMMENDED USE: Not specified

UFI NUMBERS: Not specified

MANUFACTURER/SUPPLIER INFORMATION

COMPANY NAME: Travertine Technologies

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SECTION 2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the OSHA's Hazard Communication Standard at 29 CFR 1910.1200

H290
H314

Category 1
Category 1, 1A, 1B, 1C

2.2 Label Elements



Signal Word Danger

Hazard Statements

| HAZARD CODE | STATEMENT |
|-------------|---|
| H290 | May be corrosive to metals |
| H314 | Causes severe skin burns and eye damage |

Precautionary Statements

- P234** - Keep only in original container.
- P260** - Do not breathe dust/fume/gas/mist/vapors/spray.
- P264** - Wash hands [and ...] thoroughly after handling.
- P280** - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
- P316** - Get emergency medical help immediately.
- P321** - Specific treatment (see ... on this label).
- P363** - Wash contaminated clothing before reuse.
- P390** - Absorb spillage to prevent material damage.
- P405** - Store locked up.
- P406** - Store in corrosive resistant/... container with a resistant inner liner.
- P501** - Dispose of contents/container to ...
- P304+P340** - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P301+P330+P331** - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P302+P361+P354** - IF ON SKIN: Take off Immediately all contaminated clothing. Immediately rinse with water for several minutes.
- P305+P354+P338** - IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Composition/Information on Ingredients

| CAS NO. | CHEMICAL NAME | CONCENTRATION (%) |
|-----------|-----------------|-------------------|
| 7664-93-9 | Sulfuric Acid | 12 |
| 7732-18-5 | Water, purified | 88 |

SECTION 4. FIRST AID MEASURES

4.1 Description of First Aid Measures

INHALATION : If inhaled, immediately remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, administer oxygen. Seek immediate medical attention.

SKIN CONTACT : Immediately flush skin with plenty of water for at least 60 minutes while removing contaminated clothing and shoes. Seek immediate medical attention; severe burns may result from exposure to this product.

EYE CONTACT : Immediately flush eyes with copious amounts of water for at least 30 minutes, occasionally hold eyelids open to ensure thorough rinsing. Seek immediate medical attention; continued irrigation may be needed.

INGESTION : Immediate response: immediately rinse the mouth with water. do not induce vomiting. give large quantities of water or milk if the person is conscious. seek medical attention immediately.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing Media

SUITABLE AGENTS : Dry chemical extinguishers, specifically those rated for acid spills, are suitable. They neutralize the acid and prevent further reaction. Apply in a sweeping motion from a safe distance, ensuring complete coverage.

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| UNSUITABLE AGENTS : | Water is unsuitable for extinguishing sulfuric acid fires. It reacts violently with concentrated sulfuric acid, generating heat and potentially causing splashing or a steam explosion, exacerbating the hazard. |
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5.3 Advice for Firefighters

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| GENERAL : | Water is unsuitable for extinguishing sulfuric acid fires. It reacts violently with concentrated sulfuric acid, generating heat and potentially causing splashing or a steam explosion, exacerbating the hazard. |
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| PROTECTIVE EQUIPMENT : | Water is unsuitable for extinguishing sulfuric acid fires. It reacts violently with concentrated sulfuric acid, generating heat and potentially causing splashing or a steam explosion, exacerbating the hazard. |
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SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

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| GENERAL : | Wear protective gloves, clothing, eye protection, and face protection to prevent skin and eye contact. Avoid breathing vapors or mist. Ensure adequate ventilation during handling and use of this material. |
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6.3 Methods and Materials for Containment and Cleaning Up

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| GENERAL : | Contain spills immediately with inert, non-combustible absorbent material. Prevent runoff from entering waterways or sewer systems. Neutralize any residual material with a suitable alkaline agent. |
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| SMALL SPILLS : | Contain the spill immediately by creating a barrier with inert material like sand or earth to prevent further spreading and potential environmental contamination. Ensure proper ventilation in the area. |
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| LARGE SPILLS : | For emergency response, immediately isolate the spill or leak area. Keep unauthorized personnel away. Stay upwind and ventilate the area. Wear appropriate personal protective equipment to prevent contact. |
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SECTION 7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

GENERAL :

Ensure adequate ventilation and avoid breathing vapors or mist. When handling this material, use appropriate personal protective equipment, including acid-resistant gloves, safety goggles, and protective clothing. Regularly inspect equipment for leaks or damage and promptly address any issues to prevent exposure and potential hazards.

7.2 Conditions for Safe Storage

GENERAL :

Store in a cool, well-ventilated area, away from direct sunlight and sources of heat. Keep containers tightly closed and properly labeled. Maintain adequate ventilation to prevent the accumulation of vapors. Protect containers from physical damage and regularly inspect them for leaks or signs of deterioration to ensure containment.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits Table

| CAS NO. | CHEMICAL | REGULATION | METHOD | LIMIT VALUE |
|-----------|---------------|---|---------------------------------|-------------------------|
| 7664-93-9 | Sulfuric Acid | Occupational Safety and Health Administration (OSHA) | REL-TWA (Time Weighted Average) | 1 mg/m ³ |
| 7664-93-9 | Sulfuric Acid | The National Institute for Occupational Safety and Health (NIOSH) | Recommended Exposure Limit | TWA 1 mg/m ³ |

8.2 Individual Protection Measures

Protective equipment



INHALATION :

Provide local exhaust ventilation or process enclosure to control airborne levels below exposure limits. If inhalation occurs, immediately move to fresh air and seek immediate medical attention.

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|-----------------------------------|---|
| EYE PROTECTION : | Wear appropriate eye protection, such as chemical safety goggles or a face shield, to prevent any contact with this material. Ensure eye wash stations are readily available in the work area. |
| HAND PROTECTION : | Wear chemical resistant gloves constructed of materials like butyl rubber or neoprene when handling this material to prevent skin contact. If skin contact occurs, immediately flush the affected area with copious amounts of water for at least 30 minutes. |
| SKIN AND BODY PROTECTION : | Wear chemical-resistant gloves, coveralls, and eye protection when handling this substance. If skin contact occurs, immediately flush the affected area with copious amounts of water for at least 30 minutes. Seek immediate medical attention. |
| SKIN PROTECTION : | To prevent skin contact, wear appropriate chemical resistant gloves and clothing. If skin contact occurs, immediately flush affected area with copious amounts of water for at least 30 minutes and seek medical attention. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

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| EVAPORATION RATE : | Not specified |
| WATER SOLUBILITY : | Soluble |
| FLASH POINT : | Not specified |
| SG DENSITY : | >1.0 |
| UPPER EXPLOSIVE LIMIT : | Not specified |
| MELTING POINT : | Not specified |
| DECOMPOSITION TEMPERATURE : | Not specified |
| MOLECULAR WEIGHT : | Not specified |
| VAPOUR PRESSURE : | Not specified |
| TOTAL VOC GL : | Not specified |
| STATE : | solution |
| APPEARANCE : | Not specified |
| PH : | <1.0 |

| | |
|----------------------------|---------------------|
| PH AS A SOLUTION : | Not specified |
| LOWER EXPLOSIVE LIMIT : | Not specified |
| BOILING POINT RANGE : | 290 degC / 554 degF |
| AUTOIGNITION TEMPERATURE : | Not specified |
| VOLATILES : | Not specified |
| RELATIVE VAPOUR DENSITY : | Not specified |
| VISCOSITY : | Not specified |

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

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| REACTIVITY : | This material may react exothermically with incompatible substances, generating heat. Exercise caution when combining with strong bases, metals, or organic materials to prevent violent reactions or splattering. |
| CHEMICAL STABILITY : | This material is considered stable under normal conditions of handling and storage. However, avoid extreme temperatures and incompatible materials to prevent potential hazards or degradation. |
| HAZARDOUS REACTIONS : | This material reacts violently with bases, generating significant heat and potentially causing splattering or dangerous steam. Ensure proper ventilation and cautious, slow addition when neutralizing spills. |
| CONDITIONS TO AVOID : | Avoid contact with incompatible materials, especially strong bases, metals, and reducing agents, as violent reactions and the generation of flammable or explosive gases may occur. |
| INCOMPATIBLE MATERIALS : | This material reacts violently with bases, organic materials, and many metals, generating heat and potentially flammable or explosive hydrogen gas. Store away from incompatible substances. |
| HAZARDOUS DECOMPOSITION : | Thermal decomposition may release hazardous gases, including oxides of sulfur. Avoid conditions that could lead to uncontrolled heating or combustion to prevent the formation of these irritating and corrosive decomposition products. |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity table

| CAS NO. | CHEMICAL | RESULT | DOSE | SPECIES | EXPOSURE |
|-----------|---------------|--------|-----------------------|---------|-------------------|
| 7664-93-9 | Sulfuric Acid | LC50 | 510 mg/m ³ | rat | 2 hr - Inhalation |
| 7664-93-9 | Sulfuric Acid | LD50 | 2140 mg/kg | rat | Oral |

11.1 Information on Toxicological Effects

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|----------------------------------|--|
| TARGET ORGAN TOXICITY REPEATED : | None known |
| TARGET ORGAN TOXICITY SINGLE : | Respiratory system |
| ACUTE TOXICITY : | |
| SKIN CONTACT : | Causes severe irritation and or burns |
| CARCINOGENICITY : | ACGIH (American Conference of Governmental Industrial Hygienists): A2 - Suspected Human Carcinogen IARC (International Agency for Research on Cancer): Group 1 - Carcinogenic to Humans |
| MUTAGENICITY : | No information available. |
| TERATOGENICITY : | No information available. |

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Table

| CAS NO. | CHEMICAL | SPECIES | RESULT | VALUE | DURATION |
|-----------|---------------|--------------------------------------|--------|---------|----------|
| 7664-93-9 | Sulfuric Acid | Brachydanio rerio (fresh water fish) | LC50 | 82 mg/L | 24 hr |

| CAS NO. | CHEMICAL | SPECIES | RESULT | VALUE | DURATION |
|-----------|---------------|--------------------------------------|--------|------------|----------|
| 7664-93-9 | Sulfuric Acid | Brachydanio rerio (fresh water fish) | LC50 | > 500 mg/L | 96 hr |
| 7664-93-9 | Sulfuric Acid | Carassius auratus (fresh water fish) | LC50 | 134 mg/mL | 96 hr |
| 7664-93-9 | Sulfuric Acid | Carassius auratus (fresh water fish) | LC50 | 17 mg/L | 96 hr |

12.2 Persistence and Degradability

GENERAL : Miscible with water Persistence is unlikely based on information available.

12.3 Bioaccumulative Potential

BIOACCUMULATIVE POTENTIAL : No information available.

12.4 Mobility in Soil

GENERAL : Will likely be mobile in the environment due to its water solubility.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

APPROPRIATE DISPOSAL :

ADDITIONAL INFORMATION : Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14. TRANSPORT INFORMATION

14.1 UN Number

UN ID NUMBER: 2796

SHIPPING NAME: Sulfuric Acid Solution

ENVIRONMENTAL HAZ -
ARDS : Not applicable

SPECIAL PRECAUTIONS : Not applicable

Transport Information

| TRANSPORT MODE | SUB RISK | PACKAGING GROUP |
|----------------|--------------------------|-----------------|
| DOT | Class 8 Corrosive Liquid | II |
| IATA | Class 8 Corrosive Liquid | II |

SECTION 15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations

GENERAL : The mixture contains chemicals that falls under the following regulatory Lists.

- Z-1 Table OSHA
- Pennsylvania Hazardous Substance List
- REACH Annex IV Submitted Recommendations

SECTION 16. OTHER INFORMATION

16.1 Other Information

OTHER INFORMATION :

Revision Information

- Date of Current Revision: 2025-11-19
- Date of Original Creation: 2025-11-13

Abbreviations and Acronyms

- **CAS:** Chemical Abstracts Service
- **GHS:** Globally Harmonized System of Classification and Labelling of Chemicals
- **CLP:** Classification, Labelling and Packaging Regulation (EC) No. 1272/2008
- **OSHA:** Occupational Safety and Health Administration
- **ATE:** Acute Toxicity Estimate
- **STOT:** Specific Target Organ Toxicity
- **PBT:** Persistent, Bioaccumulative, Toxic
- **vPvB:** Very Persistent and Very Bioaccumulative

Key Literature References and Sources

- Data from manufacturer/supplier
- ECHA (European Chemicals Agency) database
- OSHA Hazard Communication Standard (29 CFR 1910.1200)
- Relevant scientific literature and toxicological databases

Training Advice

- Ensure employees are trained on safe chemical handling.
- Provide instruction on proper PPE use, storage, and emergency procedures.

This Safety Data Sheet complies with GHS requirements and relevant regulations.

POWERED BY:



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