



Sulfuric Acid

SAFETY DATA SHEET

SDS Number: LSB-SA-NA-EN

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations and According to The Hazardous Products Regulation (February 11, 2015) and their amendments.

Section 1: IDENTIFICATION

Product Name: Sulfuric Acid

Synonyms: Hydrogen Sulfate, Oil of Vitriol, H₂SO₄.

Product Use: Industrial use.

Restrictions on Use: Not available.

Manufacturer/Supplier: LSB Chemical, LLC
3503 NW 63rd Street
Suite 500
Oklahoma, OK 73116

Website: www.lsbindustries.com

Email: lsbproductsupport@lsbindustries.com

Phone Number: (405) 235-4546

Emergency Phone: 24 Hour Emergency Telephone Number: 1-800-424-9300
(CHEMTREC)

Date of Preparation of SDS: January 15, 2026

Section 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

Classification: Corrosive to Metals, Category 1
Acute Toxicity - Inhalation, Category 2
Skin Corrosion, Category 1A
Eye Damage, Category 1
Carcinogenicity, Category 1A
Health Hazards Not Otherwise Classified, Category 1

LABEL ELEMENTS

Hazard

Pictogram(s):



Signal Word: Danger

Hazard Statements: H290: May be corrosive to metals.
H330: Fatal if inhaled.
H314: Causes severe skin burns and eye damage.
H350: May cause cancer (inhalation).
Causes burns to the respiratory tract.

Precautionary Statements

Prevention: P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P234: Keep only in original packaging.
P260: Do not breathe mist, vapours, or spray.



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P264: Wash hands thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves, protective clothing, eye protection and face protection.

P284: Wear respiratory protection.

Response: P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313: IF exposed or concerned: Get medical attention.
P310: Immediately call a POISON CENTER or doctor.
P363: Wash contaminated clothing before reuse.
P390: Absorb spillage to prevent material damage.

Storage: P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P406: Store in corrosive resistant container with a resistant inner liner.

Disposal: P501: Dispose of contents and container in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: None.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

This material is considered hazardous by the Hazardous Products Regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Ingredient(s) | Common name / Synonyms | CAS No. | % wt./wt. |
|-------------------------|---------------------------|-----------|-----------|
| Sulfuric acid | Not available. | 7664-93-9 | 93 - 100 |
| Hazardous Ingredient(s) | | | |
| Water | H2O | 7732-18-5 | 0 - 7 |

Section 4: FIRST-AID MEASURES

Inhalation: If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor.

Acute and delayed symptoms and effects: Fatal if inhaled. Causes burns to the respiratory tract. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.



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- Eye Contact:** If in eyes: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
Acute and delayed symptoms and effects: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.
- Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Seek immediate medical attention. Apply burn cream as directed by qualified first aid provider or medical professional.
Acute and delayed symptoms and effects: Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.
- Ingestion:** If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person.
Acute and delayed symptoms and effects: Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).
- Note to Physicians:** Symptoms may not appear immediately.

Section 5: FIRE-FIGHTING MEASURES

FLAMMABILITY AND EXPLOSION INFORMATION

Material may burn, but does not ignite readily. May ignite combustibles (wood, paper, oil, clothing, etc.). Substance will react violently with water, releasing corrosive and/or toxic gases and runoff. Flammable/toxic gases may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.). Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated or if contaminated with water.

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire involving Tanks or Car/Trailer Loads: Cool containers with flooding quantities of water until well after fire is out. Do not get water inside containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: This material is not sensitive to static discharge.



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MEANS OF EXTINCTION

| | |
|--|---|
| Suitable Extinguishing Media: | Small Fire: Dry chemical or CO ₂ . Move containers from fire area if you can do it without risk. Large Fire: Flood fire area with large quantities of water, while knocking down vapors with water fog. If insufficient water supply: knock down vapors only. |
| Unsuitable Extinguishing Media: | When material is not involved in fire, do not use water on material itself. |
| Products of Combustion: | Oxides of sulphur. |
| Protection of Firefighters: | CORROSIVE; inhalation, ingestion or contact (skin, eyes) with vapors, dusts or substance may cause severe injury, burns or death. Fire will produce irritating, corrosive and/or toxic gases. Reaction with water may generate much heat that will increase the concentration of fumes in the air. Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. |

Section 6: ACCIDENTAL RELEASE MEASURES

| | |
|-----------------------------------|---|
| Emergency Procedures: | As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150 feet). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate enclosed areas. Keep combustibles (wood, paper, oil, etc.) away from spilled material. |
| Personal Precautions: | Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protection recommended in Section 8. |
| Environmental Precautions: | Prevent entry into waterways, sewers, basements or confined areas. |
| Methods for Containment: | Stop leak if you can do it without risk. Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container. |
| Methods for Clean-Up: | Absorb spillage to prevent material damage. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. |
| Other Information: | See Section 13 for disposal considerations. |

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Section 7: HANDLING AND STORAGE**Handling:**

Do not swallow. Do not breathe mist, vapours, or spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep only in original packaging. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Additional Hazards When Processed:

May be corrosive to metals. When heated to decomposition, emits toxic fumes. Corrosive vapors are released. Contact with metals may evolve flammable hydrogen gas.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines****Component**

Sulfuric acid [CAS No. 7664-93-9]

ACGIH: 0.2 mg/m³ (TWA); A2; Thoracic particulate matter; Classification refers to sulfuric acid contained in strong inorganic acid mists (2004)

OSHA: 1 mg/m³ (TWA);

Water [CAS No. 7732-18-5]

ACGIH: No TLV established.

OSHA: No PEL established.

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

TWA: Time-Weighted Average

Engineering Controls:

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT (PPE)**Eye/Face Protection:**

Wear chemical safety goggles, and full face shield. Ensure that eyewash stations and safety showers are close to the workstation location. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3:20 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.



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| | |
|--|--|
| Hand Protection: | Wear protective gloves. Consult manufacturer specifications for further information. |
| Skin and Body Protection: | Wear protective clothing. Clothing with full length sleeves and pants should be worn. Wear chemically resistant materials and fabrics, corrosion-proof clothing. Flame resistant clothing that meets the NFPA 2112 and CAN/CGSB 155.20-2017 standards is recommended in areas where material is stored or handled. |
| Respiratory Protection: | Wear respiratory protection. If engineering controls and ventilation are not sufficient to control exposure to below regulatory limits then a self-contained breathing apparatus or supplied air breathing apparatus must be used. |
| General Hygiene Considerations: | Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection. |

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--|
| Appearance: | Colorless to tan oily liquid. |
| Color: | Colorless to tan. |
| Odor: | Odorless. |
| Odor Threshold: | Not available. |
| Physical State: | Liquid. |
| pH (1N solution): | 0.3 |
| Melting Point / Freezing Point: | -35.6 °C (-32.1 °F) (Sulfuric acid 93.2%) -1.1 °C (30 °F) (Sulfuric acid 98%) |
| Initial Boiling Point: | Not available. |
| Boiling Range: | 217.8 °C (424 °F) (Sulfuric acid 93.2%) 327.8 °C (622 °F) (Sulfuric acid 98%) |
| Flash Point: | Not available. |
| Evaporation Rate: | < 1 (n-BuAc = 1) |
| Flammability: | Not applicable. |
| Lower Flammability Limit: | Not available. |
| Upper Flammability Limit: | Not available. |
| Vapor Pressure: | Not available. |
| Relative Vapor Density: | 3.4 (Air = 1) at 20 °C (68 °F) |
| Relative Density: | 1.83 (Water = 1) |



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| | |
|--|-------------------|
| Solubility: | Soluble in water. |
| Partition Coefficient: n-Octanol/Water: | Not available. |
| Auto-ignition Temperature: | Not available. |
| Decomposition Temperature: | Not available. |
| Kinematic Viscosity: | Not available. |
| Percent Volatile, wt. %: | 100 |
| VOC content, wt. %: | Not available. |
| Density: | Not available. |
| Coefficient of Water/Oil Distribution: | Not available. |
| Particle Characteristics: | Not available. |

Section 10: STABILITY AND REACTIVITY

| | |
|--|---|
| Reactivity: | Can react explosively with reducing agents, metal powders, Hydrogen sulfide, nitrate, and organic materials. Contact with metals may evolve flammable hydrogen gas. |
| Chemical Stability: | Stable under normal storage conditions. |
| Possibility of Hazardous Reactions: | Sulfuric acid reacts violently with water with evolution of heat. Cyclopentadiene, Cyclopentanone oxime, Nitroaryl amines, Hexalithium disilicide, Phosphorous(III) oxide, Powdered metals. |
| Conditions to Avoid: | Contact with incompatible materials. Sources of ignition. Exposure to heat. Exposure to extremely low temperatures. Adding water to acid should be avoided. Do not use in direct sunlight. |
| Incompatible Materials: | Bases. Halides. Perchlorates. Peroxides. Nitrates. Phosphorus. Azides. Fulminates. Picrates. Nitromethane. Cyanides. Zinc salts. Permanganates. Amines. |
| Hazardous Decomposition Products: | Hydrogen. Oxides of sulfur. |

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

| | |
|--------------------|----------------|
| Oral: | Not available. |
| Dermal: | Not available. |
| Inhalation: | Not available. |

Component Toxicity

| Component | CAS No. | LD ₅₀ oral | LD ₅₀ dermal | LC ₅₀ |
|---------------|-----------|-----------------------|-------------------------|-----------------------------------|
| Sulfuric acid | 7664-93-9 | 2140 mg/kg (rat) | Not available. | 320 mg/m ³ (mouse); 2H |



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Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Teeth.

Symptoms (including delayed and immediate effects)

Inhalation: Fatal if inhaled. Causes burns to the respiratory tract. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.

Eye: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Skin: Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Ingestion: Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

Medical Conditions Aggravated By Exposure: Not available.

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Teeth.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation. May cause erosion of the teeth, or chronic bronchitis.

Carcinogenicity: May cause cancer. Inhalation of strong inorganic mists containing Sulfuric acid may cause cancer.

Component Carcinogenicity

| Component | ACGIH | IARC | NTP | OSHA | Prop 65 |
|---------------|-------|---------|--------|------------------|---------|
| Sulfuric acid | A2 | Group 1 | List 1 | OSHA Carcinogen. | Listed. |

Mutagenicity: Not available.

Reproductive Effects: Not available.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Not available.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Brachydanio rerio: LC50 = 500 mg/L



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Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: UN1830, SULFURIC ACID, 8, PG II

Class: 8

UN Number: UN1830

Packing Group: II

Placard(s):



ERG Guide: 137

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: UN1830, SULFURIC ACID, 8, PG II

Class: 8

UN Number: UN1830

Packing Group: II

Placard(s):



ERG Guide: 137

Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.



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Federal Regulations

United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

| Component | Section 302 (EHS) TPQ (lbs.) | Section 304 EHS RQ (lbs.) | CERCLA RQ (lbs.) | Section 313 | RCRA CODE | CAA 112(r) TQ (lbs.) |
|---------------|------------------------------------|---------------------------------|---------------------|----------------|--------------|------------------------------|
| Sulfuric acid | 1000 | 1000 | 1000 | 313 | Not listed. | Not listed. |

State Regulations

Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

| Component | CAS No. | RTK List |
|---------------|-----------|----------|
| Sulfuric acid | 7664-93-9 | E |

Note: E = Extraordinarily Hazardous Substance

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

| Component | CAS No. | RTK List |
|---------------|-----------|----------|
| Sulfuric acid | 7664-93-9 | SHHS |

Note: SHHS = Special Health Hazard Substance

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

| Component | CAS No. | RTK List |
|---------------|-----------|----------|
| Sulfuric acid | 7664-93-9 | E |

Note: E = Environmental Hazard

California

California Prop 65:



WARNING This product can expose you to Sulfuric acid, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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Section 16: OTHER INFORMATION**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. Any party handling, transferring, transporting, storing, applying or otherwise using this product should review thoroughly all applicable laws, rules, regulations, standards and good engineering practices. Such thorough review should occur before the party handles, transfers, transports, stores, applies or otherwise uses this product.

Date of Preparation of SDS: January 15, 2026

Version: 1.1

GHS SDS Prepared by: Aegis Regulatory Inc.

Phone: 1 (519) 488-0351

www.aegisreg.com