SAFETY DATA SHEET

CHEMICAL DISTRIBUTION SOLUTIONS

SECTION 1 · COMPANY AND PRODUCT IDENTIFICATION

PRODUCT

Product Name: SULFURIC ACID
Control Number: 00253
Product Description: Strong Mineral Acid

COMPANY IDENTIFICATION

Supplier: **Chemical Distribution Solutions**
1125 Oak St. Ste. 303
Conway, AR 72032

24 Hour Emergency Telephone: (800) 424-9300 CHEMTREC
General Information: (501) 978-1111

SECTION 2· HAZARDS IDENTIFICATION

GHS Classification:

[Health]	**[Environmental]**	**[Physical]**
Skin corrosion Category 1A	Acute Aquatic Toxicity Category 3	Corrosive to metals Category 1
Serious eye damage Category 1		

GHS Label elements, including precautionary statements

Pictograms

Signal Word: Danger

Hazard statement(s)
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.
Precautionary statement(s)
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P405 Store locked up.

SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	**CAS Number**	**%WT**
Sulfuric Acid	7664-93-9	51-99

SECTION 4 · FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

SECTION 5 · FIRE FIGHTING MEASURES

Suitable Extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Hazardous combustion products: No available information.
Fire Fighting Procedures: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Large fire: Flood fire area with large quantities of water, while knocking down vapors with fog. If insufficient water supply, knock down vapors only.
Tank fire: Cool containers with flooding quantities of water until well after fire is out. Do not get water inside containers. Evacuate immediately if sound from safety vents or discoloration of tank. Stay clear of tanks engulfed in fire.
Unusual Fire and Explosion Hazards: Reacts with most metals (especially dilute concentrations): Hydrogen gas release (EXTREMELY FLAMMABLE, EXPLOSIVE). Risk of explosion if acid combined with water, organic materials or base solutions in enclosed spaces (Vacuum trucks, tanks). Mixing acids of different strengths can also pose an explosive risk in an enclosed space/container.

SECTION 6 · ACCIDENTAL RELEASE and DISPOSAL MEASURES

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.
Large Spill: Corrosive liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed.
Neutralize the residue with a dilute solution of sodium carbonate.

SECTION 7 · STORAGE AND HANDLING

Handling: Keep container dry. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, organic materials, metals, alkalis, moisture. May corrode metallic surfaces. Store in a metallic or coated fiberboard drum using a strong polyethylene inner package.
Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

SECTION 8 · EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Provide adequate mechanical ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. The level of protection and types of controls will vary depending upon potential exposure conditions.

Exposure Limits: Sulfuric Acid 0.2 mg/m3 ACGIH 1 mg/m3 OSHA

Personal Protective Equipment (PPE):
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.
Skin: If prolonged or repeated skin contact is likely, wear appropriate protective gloves.
Clothing: Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.
Respirators: Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.

SECTION 9· PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: Non-Combustible
Autoignition Temperature: No available data
Boiling Point Range: 440 ^{O}F
Melting Point/Freezing Point: -30 ^{O}F
Vapor Density (Air-1): 3.4
Vapor Pressure: 1 mmHg
Odor/Appearance: Colorless oily liquid with pungent odor.

Flammability Limits: Not Applicable
Specific Gravity: 1.84
Volatile %: No available data
Evaporation Rate: No available data
pH: 1 at 5g/l
Solubility in Water: Infinitely Soluble

SECTION 10 · STABILITY AND REACTIVITY

Chemical Stability: Sulfuric acid reacts vigorously, violently or explosively with many organic and inorganic chemicals and with water.
Conditions to Avoid: Excess heat, exposure to moist air or water.
Note: Use great caution in mixing with water due to heat evolution that causes explosive spattering. Always add the acid to water, never the reverse.
Incompatibilities with Metals, oxidizing agents, reducing agents, bases, finely powdered metals, organic materials, and flammable liquids.
Hazardous Decomposition Products: Oxides of sulfur.
Hazardous Polymerization: Has not been reported.

SECTION 11 · TOXILOGICAL INFORMATION

Signs and Symptoms of Overexposure:
Skin: May cause redness, pain, and skin burns upon contact.
Eyes: May cause redness, pain, blurred vision, severe irritation, tissue damage.
Inhalation: Is not an expected hazard unless misted or heated to a high temperature. Mist or vapor inhalation can cause irritation to the nose, throat, and upper respiratory tract.
Ingestion: Harmful if swallowed**.** Product may cause sore throat, abdominal pain, nausea, and burns of the mouth, throat and digestive tract.

Acute oral toxicity:
Sulfuric Acid: LD50 rat: 2,140 mg/kg
Acute inhalation toxicity:
Sulfuric Acid: LD50 rat: 510 mg/m3 2h
Acute dermal toxicity:
Sulfuric Acid: LD50 rabbit: No published data

SECTION 12 · ECOLOGICAL INFORMATION

Aquatic Toxicity: Toxicity to fish data is not available.
Bio-accumulative potential: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.
Mobility: When released into the soil, this material may leach into groundwater. When released into the air, this material may be removed from the atmosphere to a moderate extent by dry deposition.

SECTION 13 · DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

SECTION 14 · TRANSPORTATION

U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

Proper Shipping Name:	Sulfuric Acid Solution
Hazard Class	8 Corrosive
UN Number:	1830
Packaging Group:	2

SECTION 15 · REGULATORY INFORMATION

US FEDERAL REGULATIONS

Comprehensive Environmental Response and Liability Act (CERCLA)

SARA 302: Sulfuric Acid in this material is subject to the reporting requirements of SARA Title III, Section 302. The reportable quantity (RQ) for this material is 1,000 pounds. If appropriate, immediately report to the National Response Center (800/424-8802) as required by U.S.Federal Law. Also contact appropriate state and local regulatory agencies.

Toxic Substance Control Act (TSCA): All components of this product are listed on the TSCA inventory list.

SARA Section 311/312 (40 CFR 370) Hazard Categories:
Extremely Hazardous, Acute Health Hazard, Chronic Health Hazard

SARA Section 313 (40 CFR 372) Hazard Categories:
The following components are subject to reporting levels established by SARA Title III, Section 313: Sulfuric Acid.

Clean Water Act: This product contains Sulfuric Acid a chemical listed under the CWA.

Clean Air Act: This product contains no chemicals that are listed under the CAA.

California Prop 65: This product contains Sulfuric Acid a chemical known by the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 · OTHER INFORMATION

MSDS Revision Date: January 2015

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health: 3
Flammability: 0
Reactivity: 2

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which Chemical Distribution Solutions assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.