



MATERIAL SAFETY DATA SHEET

P.O. BOX 2609
WALLA WALLA, WA 99362
Emergency Telephone: 509-522-0490

IDENTIFICATION

PRODUCT NAME : Sulfuric Acid (25% Solution)
SUBSTANCE : Sulfuric Acid, solution
CAS # : 7664 - 93 - 9
CHEMICAL FAMILY : Acid

PRODUCT INFORMATION : (509) 522-0490

EMERGENCY INFORMATION : (800) 247-9011

INGREDIENTS

INGREDIENT	CAS #
Water	7732 - 18 - 5
Sulfuric Acid	7664 - 93 - 9

All Ingredients Are Listed On The TSCA Chemical Substance Inventory

PHYSICAL DATA

BOILING POINT	: 535° F (279° C)	pH	: 1
MELTING POINT	: -20° F (-29° C)	SOLUBILITY IN WATER	: Water Solution
SPECIFIC GRAVITY	: 1.835 g/ml	VAPOR PRESSURE	: < 1mm Hg @ 100° F
% VOLATILE	: Not Applicable	EVAPORATION RATE	: None Found
FORM	: Liquid	COLOR	: Slightly colored
ODOR	: No Odor		

FIRE AND EXPLOSION HAZARDS

FLASH POINT : Not Applicable
FLAMMABLE LIMITS IN AIR : UFL : Not Applicable LFL : Not Applicable
EXTINGUISHING MEDIA : Dry chemical or carbon dioxide. Water reacts violently with concentrated acid giving off heat.
SPECIAL FIRE FIGHTING PROCEDURES : Wear self-contained breathing apparatus and full protective clothing. Thoroughly decontaminate equipment after use.
SPECIAL FIRE AND EXPLOSION HAZARDS : Will react with most metals to produce explosive hydrogen gas. Will react with organic materials with evolution of heat and sulfur dioxide.

REACTIVITY

STABILITY : Stable
DECOMPOSITION : Hydrogen gas (highly flammable/explosive limits 4-75% by volume) is generated by the action of sulfuric acid on most metals.
POLYMERIZATION : Will not occur.
INCOMPATIBILITY : Sulfuric acid is a strong mineral acid which reacts with bases and metals.
Concentrated acid is a strong oxidizing agent which can cause ignition of combustible materials on contact.
Extremely hazardous in contact with carbides, chlorates, fulminates, nitrates, picrates, and powdered metals.

HEALTH HAZARDS

TOXICOLOGY

INGESTION : Harmful or fatal if swallowed. Product will severely burn the digestive tract.
EYE CONTACT : Eye contact results in severe irritation with corneal injury and may cause permanent impairment of vision, even blindness.
SKIN CONTACT : Short single exposure may cause severe skin burns. Repeated exposure to mist or low concentrated liquid may cause dermatitis.
INHALATION : 5mg/m³ Irritation, cough, impairment of lung capacity. 80mg/m³ Immediately dangerous to life and health. Repeated exposure to mist may cause chronic bronchitis or chronic inflammation of the nose and throat, and erosion and discoloration of teeth.

FIRST AID

EYE : Immediately flush eyes for 15 minutes with plenty of water. It may take less than 10 seconds to cause permanent damage. Call a physician immediately.
SKIN : Thoroughly flushing skin with water for 15 minutes is imperative. Remove contaminated clothing; wash before reuse. Destroy contaminated shoes. Call a physician immediately.
INHALATION : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
INGESTION : **DO NOT INDUCE VOMITING.** Give large quantities of water or milk and transport to medical facility. **DO NOT** give bicarbonate. Never give anything by mouth to an unconscious person.

STORAGE AND HANDLING

Employees should be properly trained before handling sulfuric acid. Storage facilities to be separate from storage areas of incompatible material. Storage tanks must be ventilated. Do not add water to concentrated acid. Do not smoke in a sulfuric acid storage area. Use non-sparking tools and vapor-proof type electrical fixtures.

PERSONAL PROTECTION

Adequate general ventilation should be provided to keep vapor and mists below exposure limits.

Wear safety glasses with side shields. Wear a face shield if possibility of material splashing or spraying exists. Where there is possibility of skin contact, use the following as appropriate: gloves impervious to material, apron, boots, hood, pants and jacket. Wear a NIOSH/OSHA approved respirator with a dust/mist cartridge if there is potential of exposure to mists in excess of applicable limits.

MAINTAIN EYE WASH FOUNTAIN AND SAFETY SHOWER AT WORK AREA.

SPILL/LEAK PROCEDURE

Review safety precautions before proceeding with cleanup. Only trained and properly protected personnel should be involved in spill cleanup. Keep people away. Prevent contact with skin. Wear full protective equipment when handling sulfuric acid. Keep combustibles away from spilled material. Dike flow of spilled material with sand, gravel, or whatever is available. Contact appropriate federal, state or local officials. After obtaining approval from federal, state or local officials, neutralize spill with soda ash or lime to a pH of 7. Wear full protective equipment while neutralizing spill.

DISPOSAL : Disposal must meet all federal, state and local regulations. Make sure spilled material is neutralized to a pH of 7 and disposed of in an approved site. If not diluted and neutralized, this waste would be a hazardous waste (RCRA Hazardous Waste No. D002-Corrosive) as designated in 40 CFR 261.

SHIPPING INFORMATION

PROPER SHIPPING NAME : Sulfuric acid, solution.
HAZARD CLASS : Corrosive material.
UN/NA # : UN 1830
DOT LABELS : Corrosive
DOT PLACARDS : Corrosive
PACKAGING GROUP : III

TITLE III HAZARD CLASSIFICATIONS

ACUTE : Yes
CHRONIC : No
FIRE : No
REACTIVITY : Yes
PRESSURE : No

EXTREMELY HAZARDOUS SUBSTANCE : Yes
TOXIC CHEMICAL : Yes

NFPA RATINGS : HEALTH	: 3	HMIS RATINGS : HEALTH	: 3
FLAMMABILITY	: 0	FLAMMABILITY	: 0
REACTIVITY	: 2	REACTIVITY	: 2

Personal protection rating to be supplied by user depending on use conditions.

ADDITIONAL INFORMATION AND REFERENCES

This Material Safety Data Sheet refers only to the specific material designated herein, and does not relate to use in combination with any other material or in any process.