



Gujarat Alkalies and Chemicals Ltd.

Vadodara

SECTION 1: Product and Company Identification			
Name	SULPHURIC ACID		
Company	M/s Gujarat Alkalies and Chemicals Limited, P.O. Petrochemicals, Dist.: - Vadodara, Gujarat(India), Pin Code: 391346		
Synonyms	Hydrogen sulfate; Vitriol brown oil; Oil of vitriol		
Emergency Contact Details	Phone no.	09979897101, 09879604102	
	E-mail	headmarketing@gacl.co.in ccr@gacl.co.in	
SECTION 2: Hazards Identification			
Emergency Overview			
		Danger May be harmful if swallowed. Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.	
Potential Health Effects			
Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes respiratory tract irritation.		
Skin	May be harmful if absorbed through skin. Causes skin burns. Causes skin irritation.		
Eyes	Causes eye burns. Causes severe eye burns. Causes eye irritation.		
Ingestion	May be harmful if swallowed.		
Disposal	Dispose of contents/container to an approved waste disposal plant		
SECTION 3: Composition/information on ingredients			
Component	CAS-No.	EC-No.	Weight %
Sulphuric Acid	7664-93-9	231-639-5	78 %
SECTION 4: First Aid Measures			
Inhalation	If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.		
Skin	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Call a physician immediately.		
Eyes	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.		
Ingestion	Do not induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.		
Most important symptoms/effects	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation		
Notes to Physician	Treat symptomatically		
SECTION 5: Fire Fighting Measures			

Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.		
Flash Point	Not applicable	Explosion Limits	
Auto ignition Temperature	No data available	Upper	No data available
		Lower	No data available
Hazardous Combustion Products	Sulfur oxides Hydrogen		
Specific Hazards Arising from the Chemical	Thermal decomposition can lead to release of irritating gases and vapours. The product causes burn of eyes, skin and mucous membranes.		
NFPA: Health: 3	Flammability: 0	Reactivity: 2	Special hazards: ACID-COR
SECTION 6: Accidental Release Measures			
Personal Precautions	Ensure adequate ventilation. Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.		
Environmental precautions	Should not be released into the environment.		
Methods and materials for containment and cleaning up	Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.		
SECTION 7: Handling and Storage			
Handling	Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe vapors or spray mist. Do not ingest.		
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from water. Corrosives area.		
SECTION 8: Exposure Controls/Personal Protection			
Exposure Guidelines:			
Component	OSHA PEL	ACGIH TLV	
Sulphuric Acid	1 mg/m ³	0.2 mg/m ³	
Engineering Measures	Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.		
Personal Protective Equipment			
Eye/face Protection	Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards.		
Skin and body protection	Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.		
Respiratory Protection	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination type respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.		
SECTION 9: Physical and Chemical Properties			
Appearance	Clear, Colourless to brown	Water solubility	Soluble
Odour	Odourless	Auto-ignition temperature	No data available
pH	0.3 (1N)	Viscosity	No data available
Melting point/freezing	10 °C	Flammability (solid,	No data available

point		gas)	
Initial boiling point and boiling range	290 - 338 °C	Decomposition temperature	340 °C
Vapour pressure	< 0.001 mmHg @ 20 °C	Specific Gravity	1.84
Vapour density	3.38 (Air = 1.0)	Oxidizing properties	No data available
SECTION 10: Stability and Reactivity			
Reactive Hazard	Yes		
Stability	Reacts violently with water. Hygroscopic.		
Conditions to Avoid	Incompatible products. Excess heat. Exposure to moist air or water.		
Incompatible Materials	Water, Organic materials, Strong acids, Strong bases, Metals, Alcohols, Cyanides, Sulphides.		
Hazardous Decomposition Products	Sulphur oxides, Hydrogen		
Hazardous Polymerization	Hazardous polymerization does not occur.		
Hazardous Reactions	None under normal processing.		
SECTION 11: Toxicological Information			
Acute toxicity	LD ₅₀ Oral - 2140 mg/kg (Rat), Inhalation - LC ₅₀ = 510 mg/m ³ (Rat) 2 h		
Carcinogenicity	A2 - Suspected Human Carcinogen		
SECTION 12: Ecological Information			
Eco toxicity	Toxicity to fish LC ₅₀ - Gambusia affinis (Mosquito fish) - 42 mg/l - 96 h		
Other	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.		
SECTION 13: Disposal Considerations			
Waste treatment methods			
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a Chemical incinerator equipped with an afterburner and scrubber.			
Contaminated packaging	Dispose of as unused product.		
SECTION 14: Transport Information			
UN number	1830		
UN proper shipping name	Sulfuric acid		
Transport hazard class	8		
Packaging group	II		
Environmental hazards	IMDG Marine pollutant: No		
SECTION 15: Regulatory Information			
This safety datasheet complies with the requirements of Regulation.			
SECTION 16: Other Information			
Disclaimer The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.			