Safety Data Sheet

According to CFR1910/1200 and GHS Rev.10
Effective Date: 17/09/2024

Product Name: Sulphuric Acid >51%

Classified for physical and health hazards under GHS.

SECTION 1: IDENTIFICATION OF SUBSTANCE AND OF THE SUPPLIER

Product Name	**Sulphuric acid >51%**
Other Names	SULPHURIC ACID with more than 51% acid
CAS No.	7664-93-9
Product Code & Size	
Recommended Uses	Chemical intermediate; fertilisers; processing aid; catalyst; dehydrating agent; pH regulation; extractions and processing of minerals and ores; surface treatments; purification and etching; electrolytic processes; gas purification; flue gas scrubbing; production of sulphuric acid batteries; industrial cleaning.

Company Name	Viva Blu Chemical Suppliers
Address	49 Victoria Street, Windsor, QLD, 4030
Phone	+61 402 981 808
Emergency Contact Number	+61 402 981 808 General Information
24 Hour Emergency Contact	If poisoning occurs, contact a doctor or Poisons Information Centre **Australia 131 126** or **New Zealand 0800 764 766**

SECTION 2: HAZARDS IDENTIFICATION

Classification Hazardous chemical according to GHS (Globally Harmonized System)

Hazard Category

Corrosive to Metals – Category 1

Skin Corrosion/Irritation – Category 1A

Serious Eye Damage/Irritation – Category 1



Signal word: Danger

Hazard Statements

	H290	May be corrosive to metals.
	H314	Causes severe skin burns and eye damage.
	AUH071	Corrosive to the respiratory tract.

Precautionary statements

Prevention	**P260**	Do not breath fume/mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	**P303 + P361 + P353**	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
	P310	Immediately call a POISON CENTER or doctor.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
	P390	Absorb spillage to prevent material-damage.
	P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P363	Wash contaminated clothing before reuse.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
Storage	**P406**	Store in corrosive resistant container with a resistant liner.
	P405	Store locked up.
Disposal	**P501**	Dispose of contents/container in accordance with local/regional/national international regulations.

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Entity	Formula	CAS Number	Proportion
Sulphuric Acid	H2SO4	7664-93-9	>51%
Water	H2O	7732-18-5	Balance %

SECTION 4: FIRST AID MEASURES

Swallowed Rinse mouth with water. Do NOT induce vomiting. Immediately seek medical attention for advice. If vomiting, ensure free airway and prevent aspiration. Keep the person calm. Follow DRSABCD if necessary.

Eye Rinse with plenty of water at least for 15 minutes. Remove contact lenses if present and easy to do. Immediately seek medical attention for advice. Follow DRSABCD if necessary.

Skin Remove contaminated clothing and shoes and wash before re-use. Wash affected areas with plenty of water. Immediately seek medical attention for advice. Follow DRSABCD if necessary.

Inhaled Move exposed individual to a comfortable breathing position and exposure to fresh air. Loosen clothing for better breathing. Follow DRSABCD if necessary.

Advice to Doctor Corrosive effects on the skin and eyes **may be delayed** after exposure. Treat symptomatically based on individual reactions of patient and judgement of doctor.

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

Most important symptoms and effect, both acute and delayed
Irritation, burns, shortness of breath and more.

Indication of any immediate medical attention and special treatment needed
If seeking medical attention, provide SDS document to physician.

SECTION 5: FIRE FIGHTING MEASURES

General Measures	Move containers from fire area if you can do it without risk. Cool containers with water spray until well after fire is out. Do not get water inside containers.
Flammability Conditions	Non combustible material.
Extinguishing Media	If material s involved in a fire, use dry chemical, Carbon dioxide (CO2), foam or water spray for extinction (do not use water on material itself).
Fire and Explosion Hazard	Risk of violent reaction or explosion! Contact with metals may involve flammable hydrogen gas. Containers may explode when heated or if contaminated with water.
Hazardous Products of combustion	Fire will produce irritating, corrosive and /or toxic gases, including oxides and sulphur.
Special Fire Fighting Instructions	Contain runoff from fire control or dilution water – Runoff may cause pollution.
Personal Protective Equipment	Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing – 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.
Flash Point	No Data Available
Lower Explosive Limit	No Data Available
Upper Explosive Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hachem Code	2P

SECTION 6: ACCIDENTAL RELEASE MEASURES

General Response Procedure

Ensure adequate ventilation – Ventilate enclosed spaces before entering. ELIMINATE all ignition sources. Do not touch or walk through spilled material – Slippery when spilt. Avoid accidents, clean up immediately! Do not breathe mist/vapours and prevent contact with eyes, skin and clothing.

Clean up procedures

Use clean, non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal (See SECTION 13)

Containment

Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimise spreading or contact with rain.

*Use water spray to reduce vapours; do not put water directly on leak, spill area or inside container.

Decontamination

Neutralise residues with lime or soda ash. After cleaning, flush away any residual traces with water.

Environmental precautionary measures

Prevent entry into drains and waterways.

Evacuation Criteria

Spill or leak area should be isolated immediately. Evacuate personnel to safe areas. Keep unauthorized personnel away. Keep upwind and to higher ground.

Personal Precautionary Measures

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. (See SECTION 8).

*Fully encapsulating, vapour-protective clothing should be worn for spills and leaks with no fire.

SECTION 7: HANDLING AND STORAGE

Handling

Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation – Use only outdoors or in a well-ventilated place. Handle in accordance with good industry hygiene and safety practice. Do Not breathe mist/vapours and prevent contact with eyes, skin and clothing. Do not ingest. Wear protective gloves/protective clothing/eye protection/face protection and suitable respirator (See SECTION 8). CORROSIVE TO METALS: Absorb spillage to prevent material damage (see SECTION 6).

*Always add the acid to water, never the reverse.

Storage

Store in a cool (out of direct sunlight), well-ventilated and dry place. Avoid contact with water/moisture. Protect from freezing. Keep container tightly closed and in its original packaging. Check regularly for leaks. Keep away from foodstuffs and incompatible materials (see SECTION 10). Store locked up.

Container

Keep in the original, properly labelled containers.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

General	For Sulphuric acid (CAS No. 7664-93-9): Safe Work Australia Exposure Standard: TWA = 1 mg/m3; STEL = 3mg/m3 New Zealand Workplace Exposure Standard (Adopted 2018): Ceiling = 0.1mg/m3; Known or presumed human carcinogen (carcinogen category 1). NIOSH REL/OSHA PEL: TWA = 1mg/m3 Immediately dangerous to life or health (IDLH) concentration: 15mg/m3.
Exposure Limits	No information available
Biological Limits	No Data available
Appropriate Engineering Controls	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protective Equipment	Respiratory Protection: Wear respiratory protection in case of inadequate ventilation or if an inhalation risk exists. Recommended: Full face-piece particulate /mist respirator (refer to AS/NZS 1715 & 1716). Hand protection: Wear protective gloves. Recommended: Elbow-length impervious gloves. Protection of skin: Appropriate personal equipment is required like protective overalls, safety footwear and gloves. Eye Protection**:** Recommended: Chemical goggles; face shield, if splashes are likely to occur.
Special Hazard Precautions	No information available.
Work hygiene practices	Do not eat, drink or smoke when using the substance. Wash thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Liquid
Odor	Slight
Colour	Colourless to brown
pH	<1
Vapor Pressure	<0.011 kPa (@20 Deg C)
Relative Vapor Density	No Data Available
Boiling Point	~178 deg C
Melting Point	No Data Available
Freezing Point	No Data Available
Solubilities	Miscible with water
Specific Gravity	1.5 -1.85
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapor Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
Volatile Organic Compounds Volume	No Data Available

Additional Characteristics	No Information Available
Potential for Dust Explosion	Not Applicable
Fast or intensely burning characteristics	Risk of violent reaction or explosion!
Flame Propagation/Burning rate of Solid Material	No Information Available
Non-Flammables That Could Contribute Unusual Hazards to a Fire	Exothermic reaction with water which may cause violent spattering – Reaction with water may generate much heat that will increase the concentration of fumes in the air.
Properties That May Initiate or Contribute to Fire Intensity	Non-combustible material.
Reactions That Release Gases or Vapours	Decomposes on heating emitting toxic fumes, including oxides of Sulfur.
Reactions that release flammable Vapours and Gases	Contact with metals may evolve flammable hydrogen gas.

SECTION 10: STABILITY AND REACTIVITY

General Information Will react exothermically on dilution with water. Reacts exothermically with strong alkalis. May be corrosive to metals.

Chemical Stability Stable under normal conditions.

Conditions to avoid Avoid heat. Avoid contact with water/moisture

Materials to Avoid Incompatible/reactive with moisture/water, oxidizing agents, alkalis, most metals, organic chemicals.

Hazardous Decomposition products Decomposes on heating emitting toxic fumes, including oxides of Sulfur. Contact with metals may evolve flammable hydrogen gas.

Hazardous Polymerisation Hazardous polymerization will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

General information:
Information on toxicological effects:

- Acute toxicity: No information available.
- Skin corrosion/irritation: Causes severe skin burns and eye damage.
- Serious eye damage/irritation: Causes serious eye damage.
- Respiratory/skin sensitisation: No information available.
- Germ cell mutagenicity: No information available.
- Carcinogenicity: The International Agency for Research on Cancer (IARC) have concluded that occupational exposure to strong inorganic acid mists containing sulphuric acid is carcinogenic to humans, causing cancer of the larynx and to a lesser extent, the lung. No direct link has been established with sulphuric acid, itself, and cancer in humans.
- Reproductive toxicity: No information available.
- STOT (single exposure): Corrosive to the respiratory tract.
- STOT (Repeated exposure): No information available.
- Aspiration toxicity: No information available.

Information on likely routes of exposure:

- Ingestion: Corrosive to the gastrointestinal tract! Can burn mouth, throat and stomach.
- Eye contact: Corrosive to the eyes! Causes serious eye damage, including blindness.
- Skin contact: Corrosive to the skin! Causes severe skin burns.
- Inhalation: Corrosive to the respiratory tract! Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Pulmonary edema can be fatal.
- Chronic effects: Repeated overexposure may lead to chronic conjunctivitis, lung damage and dental erosion.

Acute

Ingestion

Acute toxicity (Oral):
COMPONENT: Sulphuric acid (CAS No. 7664-93-9):

- LD50, Rats: ~2140 mg/kg bw. [NICNAS]

*The effects of sulphuric acid following inhalation are entirely due to local irritation of the respiratory tract, thus classification for acute inhalation toxicity is not recommended despite low LC50s [NICNAS].

Inhalation

Acute toxicity (inhalation):
COMPONENT: Sulphuric acid (CAS No. 7664-93-9):

- LD50, Rats: 0.375 mg/L (4 h) aerosols [NICNAS].

*The effects of sulphuric acid following inhalation are entirely due to local irritation of the respiratory tract, thus classification for acute inhalation toxicity is not recommended despite low LC50s [NICNAS].

Carcinogen Category
None

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	No information available
Environmental fate	The product may affect the acidity (pH factor) in water with risk of harmful effects to aquatic organisms.
Persistence/ degradability	No information available
Mobility in Soil	No information available
Bioaccumulation Potential	No information available
Environmental Impact	No Data Available

SECTION 13: DISPOSAL CONSIDERATIONS

General Information	Whatever cannot be saved for recovery or recycling should be disposed of as hazardous waste and in accordance with local/regional/national regulations.
Special precautions for Land Fill	No information available.

SECTION 14: TRANSPORT INFORMATION

Land Transport (Australia)
ADG Code

Proper shipping name	SULPHURIC ACID with more than 51% acid
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
EPG	40 Toxic And/Or Corrosive Substances Non-Combustible -Water Reactive
UN Number	1830
Hazchem	2P
Pack Group	II
Special Provision	No Data Available

Sea Transport
IMDG Code

Proper shipping name	SULPHURIC ACID with more than 51% acid
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
UN Number	1830
Hazchem	2P
Pack Group	II
Special Provision	No Data Available
Marine Pollutant	No

Air Transport
IATA DGR

Proper shipping name	SULPHURIC ACID with more than 51% acid
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
UN Number	1830
Hazchem	2P
Pack Group	II
Special Provision	No Data Available

National Transport Commission (Australia)
Australian Code for the Transport Goods by Road and Rail (ADG Code)

Dangerous Goods Classification
Dangerous goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

SECTION 15: REGULATORY INFORMATION

General Information	SULPHURIC ACID
Poisons Schedule (AUST)	Schedule 6

SECTION 16: CONTACT INFORMATION

Any advice, recommendation, information, assistance, or service provided by Viva Blu in relation to the goods supplied by it or their use or application is given in good faith and believed to be appropriate and

reliable. However, it is provided with a disclaimer of any liability on the part of Viva Blu. The customer accepts all risk and responsibility for use of the goods alone, or in combination with other products. All warranties, guarantees and conditions, other than those expressly stated, and whether implied by stature, common law, custom of the trade otherwise, are to the extent that the law permits expressly excluded.

Craig Mair
Managing Director

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