


Sulphuric Acid

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product Name:	Sulphuric Acid
Other Names:	Sulphuric Acid 98.5%, Oil of Vitriol
Product Code:	8100000
Recommended Use:	Chemical reagent
Restrictions of Use:	Refer to Section 15
Company Identification:	Ravensdown Limited
Address:	292 Main South Road, Hornby, Christchurch, 8042 PO Box 1049, Christchurch 8011
Customer Centre:	0800 100 123
National Poisons Information Centre:	0800 POISON (0800 764 766)
Emergency Phone Number:	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
Transport Emergency Phone Number:	111 - tell operator what service is needed: Fire, Ambulance or Police
Date of SDS Preparation	11 May 2026 v3

Section 2: HAZARD IDENTIFICATION

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No:	HSR001572
Pictograms:	
Signal Word:	DANGER

GHS Classification	Hazard Code	Hazard Statement
Acute inhalation toxicity Cat. 4	H332	Harmful if inhaled.
Carcinogenicity Cat. 1	H350	May cause cancer.
Specific target organ toxicity – repeated exposure Cat. 1	H372	Causes damage to organs through prolonged or repeated exposure.
Specific target organ toxicity – single exposure Cat. 3 respiratory tract irritation	H335	May cause respiratory irritation.
Corrosive to metals Cat. 1	H290	May be corrosive to metals.
Skin corrosion Cat. 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment chronic Cat. 3	H412	Harmful to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.

P202	Do not handle until all safety precautions have been read and understood.
P234	Keep only in original container.
P260	Do not breathe fumes, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
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 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.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.

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

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3: COMPOSITION INFORMATION

INGREDIENT	CAS No.	CONTENT
Sulphuric Acid	7664-93-9	98.5%
Water	7732-18-5	1.5%

Section 4: FIRST AID MEASURES

Routes of Exposure:	
If in eyes:	If Diphoterine SIEW or Diphoterine solution is available: Wash eye with contents of SIEW where available and continue washing with portable Diphoterine solution Otherwise: Flush with plenty of water for several minutes holding eyelid open if necessary. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes or until advised to stop by Poisons Information Centre or Doctor. Seek medical assistance.
If on skin:	If Diphoterine Micro DAP is available: Remove contaminated clothing and wash continuously with Micro DAP solution Otherwise: Remove contaminated clothing and flush skin underwater for 15 minutes. Contact the National Poisons Centre on number above. For skin burns, cover with a clean dry dressing until medical help is available.
If ingested:	For advice, contact the National Poisons Centre on number above. Seek medical assistance immediately. Never give anything by mouth to an unconscious person. If swallowed rinse mouth but DO NOT induce vomiting. Give a glass of water.
If inhaled:	Remove patient from area of exposure. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood – cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek medical advice.

Most important symptoms and effects, both acute and delayed	
Symptoms:	Refer to Section 11 for all symptoms.
Eyes:	Causes serious eye damage.
Skin:	Causes severe skin burns.
Ingested:	Not applicable.
Inhaled:	Harmful if inhaled. May cause respiratory irritation.
Chronic:	May cause cancer. Causes damage to organs through prolonged or repeated exposure.
Notes to Doctor:	Treat symptomatically. Effects may be delayed. Can cause corneal burns.

Section 5: FIRE FIGHTING MEASURES

Hazard Type	Non Flammable
Hazards from combustion products	Non-combustible but may emit sulphuric acid mist/fumes and sulphur dioxide if involved in fire.
Suitable Extinguishing media	Not combustible, however, if material is involved in fire use: Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).
Precautions for firefighters and special protective clothing	Self-contained breathing apparatus, suitable protective clothing including goggles and protective gloves.
HAZCHEM CODE	2P

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Wear appropriate protective clothing as detailed in Section 8. Exclude non-essential people from the area.
Environmental precautions:	Avoid unintended release of excessive amounts into waterways or sewers. If spill does enter waterway contact local authority.
Methods and material for containment and cleaning up:	Contain spill and use absorbent (enviropeat, vermiculite or other inert material) and add large quantities of water. Neutralise with lime or soda ash. Collect and place in sealable containers. Avoid generating dust. Reuse or recycle where possible. Dispose of according to Section 13.

Section 7: HANDLING AND STORAGE

Handling:	<p>Read label before use.</p> <p>Obtain special instructions before use.</p> <p>Do not handle until all safety precautions have been read and understood.</p> <p>Always add the acid to water, never the reverse.</p> <p>Keep only in original container.</p> <p>Do not breathe fumes, vapours or spray.</p> <p>Wash hands thoroughly after handling.</p> <p>Do not eat, drink or smoke when using this product.</p> <p>Use only outdoors or in a well-ventilated area.</p> <p>Wear protective clothing as detailed in Section 8.</p>
Storage:	<p>Store in a cool, dry area away from alkalis, amines, reducing agents, oxidising agents some aldehydes, ketones, styrene monomer. Store in containers approved for sulphuric acid.</p> <p>Keep out of the reach of children.</p> <p>Store locked up.</p> <p>Store in corrosive resistant container with a resistant inner liner.</p> <p>Store in a well-ventilated place. Keep container tightly closed.</p> <p>Quantities greater than 1,000 litres require secondary containment.</p>

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Product Name: Sulphuric Acid Date of SDS: 30 April 2021				

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices FEB 2025 15TH EDITION.

Engineering Controls:	Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. If inhalation risk exists: Use with local exhaust ventilation while wearing suitable mist respirator. Keep containers closed when not in use.
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Personal Protection Equipment:


Eyes:	Always wear goggles or a face shield. Eye wash facilities must be available.
Skin/Hands:	Always wear PVC or other suitable gloves, PVC overtrousers, overcoat and gumboots. Ensure safety shower available.
Respiratory:	If mist or vapour present wear suitable mask with acid mist canister.
General:	Do not eat, drink or smoke while using this product. Remove protective clothing and wash hands and face before meals and after work. Wash protective clothing daily after work.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Colour	Heavy colourless to oily brown
Odour	Odourless
Odour Threshold	Not available
pH	<1
Boiling Point	310°C
Melting Point	5°C
Freezing Point	Not available
Flash Point	Not available
Flammability	Non flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	1.84g/cm ³ @ 15°C
Water Solubility	Miscible – never add water to acid.
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available

Section 10: STABILITY AND REACTIVITY

Stability of Substance	Stable under normal conditions.
Possibility of hazardous reactions	Not available
Conditions to Avoid	Exothermic reaction with water which may cause violent spattering, in concentrated form. Never add water to acid.

Incompatible Materials	Keep away from alkalis, amines, reducing agents, oxidising agents some aldehydes, ketones, styrene monomer. Corrosive to most metals liberating flammable hydrogen gas.
Hazardous Decomposition Products	None. Will release flammable hydrogen gas on reaction with most metals.

Section 11: TOXICOLOGICAL INFORMATION

Acute Effects:

Swallowed	May be harmful if swallowed. Swallowing acid rapidly destroys body tissue causing severe burns. LD50 (Oral, rat) 2,140mg/kg.
Dermal	Not applicable.
Inhalation	Harmful if inhaled. May cause respiratory irritation. Breathing, in mists or aerosols. Damages the lungs and may cause pulmonary oedema. Nose, mouth and throat may be damaged.
Eye	Corrosive to eyes. Causes severe damage often leading to blindness. Mists and vapours are severe eye irritants.
Skin	Will destroy body tissue and result in severe burns. Mists and vapours are severe irritants to mucous membrane and skin.

Chronic Effects:

Carcinogenicity	May cause cancer.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Causes damage to organs through prolonged or repeated exposure.

Section 12: ECOLOGICAL INFORMATION

Not hazardous to the environment.

Product:	
Persistence and degradability	No data available.
Bioaccumulation	No data available.
Mobility in Soil	No data available.
Other adverse effects	Avoid washing excessive amounts into streams and waterways. Avoid unintended release into the environment.

Section 13: DISPOSAL INFORMATION

Disposal Method:	Dispose of product only by using according to label or at an approved landfill. Recycle where possible. Do not contaminate bodies of water with chemical or empty container. Refer to the Local council bylaws and Land Waste Management Authority.
Container Disposal:	Burn container in an appropriate incinerator if circumstance, such as wind direction permit. Otherwise bury in an approved landfill. Do not use container for any other purpose.
Precautions or methods to avoid:	Do not allow to enter waterways.

Section 14: TRANSPORT INFORMATION

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020



Road, Rail, Sea and Air Transport

UN No	1830
Class - Primary	8
Packing Group	II
Proper Shipping Name	SULPHURIC ACID
Marine Pollutant	No
Special Provisions	If the product's individual container is below 1L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15: REGULATORY INFORMATION

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code:	HSR001572
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HSW (HS) Regulations 2017	Trigger Quantity
Signage Trigger Quantities (Schedule 3)	250L
Emergency Response Plan (Schedule 5)	1000L
Secondary Containment (Schedule 5)	1000L
Location Certificate	250L
Tracking (Schedule 26)	Not required
Certified Handlers	Not required
Restrictions of use	None known.

Section 16: OTHER INFORMATION

Glossary

Cat	Category
EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices FEB 2025 15th edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact Ravensdown, if further information is required.

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