

Safety Data Sheet

Environmental Protection Authority

Hazardous Substances (identification)
Regulations 2004 (NZ)



Product Name
Rebelein Z4

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section 1

Manufacturer's Name: Pacific Rim Oenology Services	Emergency Telephone Number: National Poisons 24hr: 0800 764 766
Address (Number, Street, City, Region, and Post Code): 4 Bristol St, Riverlands, Blenheim, Marlborough, 7274	Telephone Number for Information: (+64) (0) 3 577-9000
PO Box 1132, Blenheim 7240	Original - Issue date: 19/07/17 - 14/11/17
New Zealand	

Section 2 - Hazard(s) identification

Hazardous Components (Specific Chemical Identity; Common Name(s))	HSNO for components	Classification
Sulphuric Acid #7664-93-9	HSR001572	6.1D, 6.1E, 6.7A, 6.9A, 8.1A, 8.2B, 8.3A, 9.1C, 9.1D

Section 3 - Label Elements



Signal Word

Danger

Hazard Statements

H290 - May be corrosive to metals
H303 - May be harmful if swallowed
H314 - Causes severe skin burns and eye damage
H402 - Harmful to aquatic life

Precautionary Statements

P262 - Do not get in eyes, on skin, or on clothing
P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P281 - Use personal protective equipment as required
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P302 + 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
 P310 - Immediately call a POISON CENTER or doctor/ physician
 P363 - Wash contaminated clothing before reuse
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
 P501 - Dispose of contents/ container to an approved waste disposal plant

Section 4 - Composition and information on ingredients

Component	CAS-No	Weight %
Sulphuric Acid	7664-93-9	15-20

Section 5 - First Aid Measures

Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Most important symptoms/effects	Causes burns by all exposure routes. Product is a corrosive material. Do not induce vomiting or pump stomach. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.
Inhalation	Remove from exposure, lie down. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration. Call a physician immediately.
Ingestion	Do not induce vomiting. Clean mouth with water and drink afterwards plenty of water. Call a physician.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use, including shoes. Call a physician.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, also under eyelids. Keep eye wide open while rinsing. Immediate medical attention is required.
First Aid Facilities	Eyewash, safety shower and washroom.
Notes to Physician	Treat symptomatically. Symptoms may be delayed.

Section 6 - Fire Fighting Measures

Suitable Extinguishing Media

Water spray, CO₂, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable extinguishing Media

No information available.

Hazardous Combustion Products

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

The product causes burns of eyes, skin and mucous membranes.

Contact with metals can cause formation of flammable and explosive hydrogen gas.

Special protective equipment and precautions for fire fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Thermal decomposition can lead to release of irritating gases and vapors.

Section 7 - Accidental Release Measures

Emergency procedures

Use personal protective equipment.

Ensure adequate ventilation.

Evacuate personnel to safe areas.

Environmental Precautions

See Section 13 for additional ecological information.
Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up

Soak up with inert absorbent material.
Keep in suitable, closed containers for disposal.

Reference to Other Sections

Refer to protective measures listed in Sections 9 and 14.

Section 8 - Handling and Storage

Precautions for Safe Handling

Use only under a chemical fume hood.
Wear personal protective equipment.
Do not breathe vapors or spray mist.
Do not get in eyes, on skin, or on clothing.
Do not ingest.

Conditions for Safe Storage, Including any Incompatibilities

Keep container tightly closed in a dry and well-ventilated place.
Keep away from heat and sources of ignition.
Store in corrosives area.
AS/NZS 2243.10:2004, Safety in Laboratories - Storage of chemicals

Section 9 - Exposure Controls and Personal Protection

Exposure limits

Workplace Exposure Standards and Biological Exposure Indices (8th edition). New Zealand Department of Labour

Component	New Zealand WEL
Sulphuric Acid	TWA: 1 mg/m ³

Biological limit values

Substances assigned Biological Exposure Indices in the New Zealand Workplace Exposure Standards and Biological Exposure Indices (8th edition). New Zealand Department of Labour.
This product as supplied does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Engineering Measures

Ensure eye wash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal protective equipment

Eye Protection	Safety glasses with side-shields (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial applications).
Hand Protection	Protective gloves (AS/NZS 2161.1).
Skin and body protection	Long sleeved clothing.
Respiratory Protection	Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use and maintenance of respiratory protective devices.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No information available.

Section 10 - Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Clear Colourless
Physical State	Liquid
Odour	No information available
Odour Threshold	No data available
pH	1.0
Melting Point/Range	10 °C / 50 °F
Softening Point	No data available
Boiling Point/Range	270 °C / 518 °F
Flash Point	No information available
Evaporation Rate	No data available
Flammability (solid, gas)	Not applicable - Liquid
Explosion Limits	No data available
Vapour Pressure	No data available
Vapour Density	3.4 (Air = 1.0)
Specific Gravity / Density	1.15
Bulk Density	Not applicable
Water Solubility	Miscible with water, liberates much heat
Solubility in other solvents	No information available
Partition Coefficient (n-octanol/water)	
Component	log Pow
Ethyl alcohol	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidising Properties	No information available
Other information	
Molecular Formula	H ₂ SO ₄
Molecular Weight	98.07

Section 11 - Stability and Reactivity

Reactivity	Reacts violently with some bases
Stability	Stable under normal conditions
Conditions to Avoid	Incompatible products, alkalis, readily undergoes violent chemical changes at elevated temperatures and pressures
Hazardous Decomposition Products	None under normal use conditions
Hazardous Polymerisation	Hazardous polymerisation does not occur

Section 12 - Toxicological Information

Information on Toxicological Effects Product Information

a) acute toxicity;	
Oral	Category 5
Dermal	Based on data available, the classification criteria are not met
Inhalation	Category 4
(b) skin corrosion/irritation;	Category 1B
(c) serious eye damage/irritation;	Category 1
(d) respiratory or skin sensitization;	Based on available data, the classification criteria are not met
Respiratory	Based on available data, the classification criteria are not met
Skin	Based on available data, the classification criteria are not met
(e) germ cell mutagenicity;	Based on available data, the classification criteria are not met
(f) carcinogenicity;	Based on available data, the classification criteria are not met
(g) reproductive toxicity;	Based on available data, the classification criteria are not met
(h) STOT-single exposure;	Category 1
(i) STOT-repeated exposure;	Category 1
Target Organs	Respiratory tract
(j) aspiration hazard;	Liquid - N/A
Symptoms / effects, both acute and delayed	Product is a corrosive material. Symptoms may include irritation of the nose and throat and laboured breathing. Can cause severe burns of the mouth, throat and stomach if ingested. Corrosive to eyes and skin, can cause severe burns.

Section 13 - Ecological Information

Ecotoxicity effects	Contains substances that are toxic to fish and crustaceans
Persistence and Degradability	
Persistence	Miscible with water Persistence is unlikely, based on information available.
Degradation in sewage	Contains substances known to be hazardous to the environment but is degradable in waste water plants.
Treatment plant	Contains substances known to be hazardous to the environment but is degradable in water treatment plants.
Bioaccumulative Potential	Bioaccumulation is unlikely.
Mobility	The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility Highly mobile in soils.
Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors.
Persistent Organic Pollutant	This product does not contain any known or suspected substance
Ozone Depletion Potential	This product does not contain any known or suspected substance

Section 14 - Disposal Considerations

Waste from Residues / Unused Products	Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.
Contaminated Packaging	Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, and can be dangerous. Keep product and empty container away from heat.
Other Information	Disposal agencies or waste contractors must comply with the New Zealand Hazardous Substances (Disposal) Regulations. Do not empty into the drains. Do not dispose of waste into sewer. Waste codes should be assigned by the user based on the application for which the product was used. Large amounts will affect pH and harm aquatic organisms. Solutions with low pH-value must be neutralized before discharge.

Section 15 - Transport Information

IMDG/IMO

UN-No	UN1830
Proper Shipping Name	SULPHURIC ACID greater than 10%
Hazard Class	8
Packing Group	II

NZS 5433:2012

UN-No	UN1830
Proper Shipping Name	SULPHURIC ACID greater than 10%
Hazard Class	8
Packing Group	II

Component	Hazchem Code
Sulphuric Acid (7664-93-9)	2P

IATA

UN-No	UN1830
Proper Shipping Name	SULPHURIC ACID, greater than 10%
Hazard Class	8
Packing Group	II

Environmental hazards	Harmful to aquatic environment in large amounts
Special Precautions	No special precautions required
Additional information	None known

Section 16 - Regulatory Information

Component	HSNO Approval Number
Z4 Solution	HSR002596

Section 17 - Other Information

Legend

WEL - Workplace Exposure Limit

TWA - Time Weighted Average

Key literature references and sources for data

Suppliers safety data sheet, EPA,NZTA, NZ Safety

For a correlation of GHS and HSNO classes and categories refer to:

<http://www.epa.govt.nz/publications/hsnogen-ghs-nz-hazard.pdf>

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers. Chemical incident response training.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

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Owner: Laboratory Manager

Disclaimer

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End of Safety Data Sheet