

Version 1.1

Issue date 05/09/2024

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

Product Identifier

Product Name	Copper Sulphate Pentahydrate
Other Names	Copper sulphate, Bluestone, Sulphuric Acid, Copper (2+) Salt (1:!), Pentahydrate.
Proper Shipping Name	Copper Sulphate Pentahydrate
Other means of Identification	None

Relevant identified uses of the substance or mixture

Relevant identified uses	Used as an agricultural fungicide, bactericide, algaecide, herbicide, and feed and fertiliser additive.
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Details of the supplier of the safety data sheet

Registered company name	Vetpak Limited
Address	249 Bruce Berquist Dr, Te Awamutu 3800.
Telephone	(07) 870 2024
Website	www.vetpak.co.nz
Email	sales@vetpak.co.nz

Emergency telephone numbers

Association/ Organisation	New Zealand National Poison information centre
Emergency telephone number	0800 764 766 (07) 870 2024 Vetpak. 8.00am to 5.00pm Monday to Friday except public holidays.
Other emergency telephone numbers	New Zealand emergency services 111


SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification:

Classed as a dangerous good for transport and logistics

Hazardous according to the criteria of the Globally Harmonised System of classification and labelling of chemicals (GHS)

Label pictograms

GHS label elements	
Signal Word	WARNING

Hazard statements

HSNO	Hazard Code	GHS Category	Hazard Statement
6.1D	H 302 / H312 / H332	Category 4	Harmful if swallowed / inhaled or in contact with skin
6.3A	H 315	Category 2	Causes skin irritation.
6.4A	H 319	Category 2	Causes serious eye irritation
6.5B	H 317	Category 1	May cause an allergic skin reaction.
6.9B	H 371 / H373	Category 2	May cause damage to liver and kidneys
9.1A	H 400 / 410	Category 2	Very toxic to aquatic life with long lasting effects.
9.3C	H 433	None	Harmful to terrestrial vertebrates

Precautionary statements prevention

P102	Keep out of the reach of children
P103	Read label before use
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash hands thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P280	Wear protective gloves/eye protection/ face protection

Precautionary statement responses

P101	If medical advice is needed have the product container or label on hand
P301 + P312	If swallowed. Call a poisons centre or doctor/ physician if you feel unwell
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before re-use.
P391	Collect spillage

Precautionary statement disposal

P501	Disposal should be through a suitably qualified contractor following the EPA guidelines
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SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

CAS Number	% (weight)	Name
7758 – 99 – 8	> 98%	Copper Sulphate Pentahydrate



SECTION 4 – FIRST AID MEASURES

Description of first aid measures

Eye contact	<p>If this product comes in contact with eyes</p> <ul style="list-style-type: none"> ➤ Flush with plenty of water for several minutes, holding eyelids open if necessary. ➤ Remove contact lenses if present and easy to do. ➤ If eye irritation persists: Get medical advice/attention.
Skin contact	<ul style="list-style-type: none"> ➤ Remove contaminated clothing and wash before reuse. ➤ Wash affected area thoroughly with soap and water. ➤ If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	<ul style="list-style-type: none"> ➤ Remove patient to fresh air. ➤ Lie down and keep warm and rested. ➤ If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. ➤ Seek medical assistance If needed.
Ingestion	<ul style="list-style-type: none"> ➤ Rinse mouth. Never give anything by mouth to an unconscious person. ➤ If swallowed DO NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
Advice to the doctor	<p>Show this safety data sheet (SDS) to the doctor in attendance. Treat symptomatically. Keep victim calm and warm. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves</p>

SECTION 5 – FIREFIGHTING MEASURES

Extinguishing media

- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire incompatibility	Not considered a flammable product
Hazards from combustion	Sulphur oxides, copper oxides, May release copper dust and fumes

Advice for fire fighters

Fire fighting	<ul style="list-style-type: none"> ➤ Wear breathing apparatus plus protective gloves in the event of a fire. ➤ Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. ➤ DO NOT approach containers suspected to be hot. ➤ Equipment should be thoroughly decontaminated after use.
Fire/explosion hazard	<ul style="list-style-type: none"> ➤ Not considered to be a significant fire risk.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor spills	<ul style="list-style-type: none"> ➤ Clean up all spills immediately. ➤ Avoid breathing dusts and contact with skin and eyes. ➤ Control personal contact with the substance, by using protective equipment. ➤ Wipe up. Place in a suitable, labelled container for waste disposal.
Major spills	<ul style="list-style-type: none"> ➤ Wash area and prevent runoff into drains or waterways. ➤ If contamination of drains or waterways occurs, advise emergency services.
Clean Up Procedures	<ul style="list-style-type: none"> ➤ Contain and place in sealable containers



SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling

Safe Handling	<ul style="list-style-type: none"> ➤ Read label before use ➤ Limit all unnecessary personal contact. ➤ Wear protective clothing when risk of exposure occurs. ➤ Use in a well-ventilated area. ➤ When handling DO NOT eat, drink or smoke. ➤ Always wash hands with soap and water after handling. ➤ Avoid physical damage to containers. Use good occupational work practice. ➤ Observe manufacturer's storage and handling recommendations contained within this SDS.
Other information	<ul style="list-style-type: none"> ➤ Use site signage for large quantities ➤ Protect containers from damage and check regularly for leaks ➤ Store in accordance with NZS 8409; Management of Agrichemicals.


Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ➤ Store away from incompatible materials listed ➤ Store locked up ➤ Check all containers are clearly labelled and free from leaks.
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SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

General	<p>No exposure limits have been assigned for this product.</p> <p>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.</p> <p>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.</p> <p>The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.</p>
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Exposure controls

Appropriate engineering controls	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level protection.</p> <p>The basic controls are:</p> <p>Process controls which involve changing the job activity or process to reduce risk</p> <p>Enclosure and or isolation source control keeping workers physically safe</p> <p>Ventilation that strategically adds and removes air in work environment. Ventilation can remove or dilute an air contaminant if designed properly</p>
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ➤ Safety glasses with side shields ➤ Contact lenses may pose a special hazard soft contact lenses may absorb and concentrate materials. ➤ Medical personal should be trained and readily available in the event of chemical



	exposure; they should begin eye irrigation and remove contact lenses as soon as practicable. Lenses should be removed at the first sign of eye irritation
Skin protection	Wear general protective gloves e.g. light weight rubber gloves
Hand / feet protection	As above for hands; wear appropriate footwear for the environment
Body protection	Overalls or PVC Aprons if available
Other protection	<ul style="list-style-type: none"> ➤ Overalls ➤ PVC Aprons ➤ PVC protective gear ➤ Eyewash facilities ➤ Ensure there is ready access to a safety shower ➤ Non sparking footwear

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Red crystals or powder	Relative density (Water = 1)	1.015
Odour	Odourless	Specific gravity	1.95g/m ³
Odour threshold	Not Available	Bulk density	1215 kg m ³
pH	4	Viscosity	Not available
Melting point (°C)	> 41°C	Decomposition Temperature	735°C
Boiling point (°C)	Not available	Water Solubility	Soluble
Flash point (°C)	Not available	Explosive properties	Not available
Vapour pressure	Not Available	Oxidising properties	Not available
Flammability	Not flammable	Volatile component (% vol)	Not available

SECTION 10 – STABILITY AND REACTIVITY

General Information	Stable under normal conditions
Chemical stability	Stable
Conditions to avoid	Releases water of crystallisation when heated
Incompatible materials	None
Hazardous Polymerisation	Sulphur Oxides

SECTION 11 – TOXICOLOGICAL INFORMATION

Inhalation	Not triggered
Ingestion	Harmful if swallowed. Ingestion of large quantities may lead to diarrhoea, abdominal pain, nausea, drop in body temperature, and drop in blood pressure. Toxic effect to kidneys, heart and pancreas.
Skin	Causes skin irritation. May cause an allergic skin reaction.
Eyes	Causes severe eye irritation.
Carcinogenicity	Suspected of causing cancer.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
Germ Cell Mutagenicity	Not applicable.
STOT/RE	Causes damage to organs through prolonged or repeated exposure. Toxic effect to kidneys, heart and pancreas.



SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity	Very toxic to aquatic life with long lasting effects.
Chlorhexidene Gluconate	No information available
Persistence/Degradability	No information available
Bioaccumulation Potential	No information available
Environmental Impact	No information available


SECTION 13 – DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	<ul style="list-style-type: none"> ➤ 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. ➤ Dissolved material in excess water is normally suitable for disposal in storm water system.
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SECTION 14 – TRANSPORT INFORMATION

Labels required

	
Marine Pollutant	Yes
HAZCHEM	2Z

Land transport (ADG)

UN Number	3077
Packing group	III
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S
Environmental hazard	Yes
Transport hazard classes	Class 9
Special precautions for user	If the product's individual container is below 5kg, it can be transported as a non-DG

Air transport (ICAO-IATA / DGR)

UN Number	3077
Packing group	III
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S
Environmental hazard	Yes
Transport hazard classes	Class 9
Special precautions for user	If the product's individual container is below 5kg, it can be transported as a non-DG

Sea transport (IMDG / GGVSee)

UN Number	3077
Packing group	III
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S
Environmental hazard	Yes



Transport hazard classes	Class 9
Special precautions for user	If the product's individual container is below 5kg, it can be transported as a non-DG
Marine Pollutant	Yes

Transport in bulk according to Annex II of Marpol and the IBC Code - Not applicable

SECTION 15 – REGULATORY INFORMATION

Safety, health and environment regulations / legislation specific for the substance or mixture

GHS Codes	6.1D, 6.3A, 6.4A, 6.5A, 6.5B, 6.7B, 6.8B, 6.9A, 9.1A
National Inventory	Status
Australia – AICS	Yes
Europe – EINEC / ELINCS / NLP	Yes
New Zealand – NZIoC	Yes
	All ingredients are on the inventory
Environmental Protection Authority (New Zealand)	Additives, process chemicals and raw materials (carcinogen)
Approval Code	HSR002512
Signage Trigger	100kg
Emergency response Trigger	100kg
Secondary containment	100kg
Certified Handler	Not required
Restriction of use	None known

SECTION 16 – OTHER INFORMATION

While Vetpak Limited in good faith has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Vetpak Limited accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

New Zealand National Poison Information Centre: 0800 764 766
New Zealand Emergency Services: 111
Vetpak Limited: +64 7 870 2024

Definitions and abbreviations

PC – TWA	Permissible concentration – time weighted average
PC – STEL	Permissible concentration – short term exposure limit
IARC	International agency for research on cancer
ACGIH	American conference of Government Industrial Hygiene
STEL	Short term exposure limit
TEEL	Temporary emergency exposure limit
IDLH	Immediate dangerous to life or health concentration
OSF	Odour safety factor
NOAEL	No observed adverse effect level
LOAEL	Lowest observed adverse effect level
TLV	Threshold limit value
LOD	Limit of detection



OTV	Odour threshold value
BCF	BioConcentration factors

END OF SDS

