

Version 1.1

Issue date 25/09/2024

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

Product Identifier

Product Name	Vetmag Ultrafine
Other Names	Caustic Calcined Magnesite (CCM), Magnesium Oxide
Proper Shipping Name	Magnesium Oxide
Other means of Identification	None

Relevant identified uses of the substance or mixture

Relevant identified uses	Tailing treatment, sewerage treatment, stock feed, and fertiliser
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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:

This product is not hazardous according to the criteria of the Globally Harmonised System of classification and labelling of chemicals (GHS)

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

CAS Number	% (weight)	Name
1309 – 48 – 4	> 85 %	Magnesium oxide
1305 – 78 – 8	< 15 %	Calcium oxide
14808 – 60 – 7	< 5 %	Silicon dioxide
1309 – 37 – 1	< 1 %	Iron oxide
1344 – 28 – 1	< 1 %	Aluminium oxide
1313 – 13 – 9	< 1 %	Manganese dioxide

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

Eye contact	<ul style="list-style-type: none"> ➤ Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. ➤ Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. ➤ Seek medical advice/attention immediately
Skin contact	<ul style="list-style-type: none"> ➤ Wash with plenty of soap and water. ➤ Take off contaminated clothing and wash it before reuse. ➤ If skin irritation occurs, get medical advice/attention.
Inhalation	<ul style="list-style-type: none"> ➤ Remove victim to fresh air and keep at rest in a position comfortable for breathing. ➤ If respiratory symptoms persist, get medical advice/attention. ➤ Give artificial respiration if victim is not breathing.
Ingestion	<ul style="list-style-type: none"> ➤ Rinse mouth, and then drink a glass of water. Do not induce vomiting. Get medical advice/attention if you feel unwell. ➤ Never give anything by mouth to an unconscious person.
Advice to the doctor	Treat symptomatically and supportively. Most important symptoms and effects, both acute and delayed. Eye bath and normal washroom facilities are essential

SECTION 5 – FIREFIGHTING MEASURES

Extinguishing media	<ul style="list-style-type: none"> ➤ Use dry chemical, Carbon dioxide (CO₂) ➤ Alcohol-resistant foam or water spray for extinction ➤ Use media appropriate to the surrounding fire
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Flammability Conditions	<ul style="list-style-type: none"> ➤ Alert fire brigade and tell location and nature of hazard ➤ Non flammable
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Advice for fire fighters

Fire fighting	<ul style="list-style-type: none"> ➤ Alert fire brigade and tell location and nature of hazard ➤ Wear breathing apparatus plus protective gloves in the event of a fire ➤ Prevent spillage from entering the waterways or drains ➤ Consider evacuation (or protect in place) ➤ Fight the fire from a safe distance and adequate cover
Protection Equipment	<ul style="list-style-type: none"> ➤ Wear positive pressure self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor spills	<ul style="list-style-type: none"> ➤ Remove all ignition sources ➤ Clean up spills immediately ➤ Contain and absorb small quantities with a broom, brush and shovel
Major spills	<ul style="list-style-type: none"> ➤ Prevent spillage from entering the waterways or drains ➤ Consider evacuation (or protect in place) ➤ Increase ventilation
Clean Up Procedures	<ul style="list-style-type: none"> ➤ Recover large spills for salvage or disposal. Pick up spills/residue material and place into containers for later disposal. Never return spills into original containers for re-use.



Containment	<ul style="list-style-type: none"> ➤ Stop spillage if safe to do so - Prevent entry into waterways, drains or confined areas. Vacuum or sweep up residue while preventing dust generation
Decontamination	<ul style="list-style-type: none"> ➤ Clean surface thoroughly to remove residual contamination. Wash hard surfaces with detergent if necessary
Environment Precaution Measures	<ul style="list-style-type: none"> ➤ Prevent entry into drains and waterways. ➤ Dispose of any absorbent material properly according to local authority regulations

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling

Safe Handling	<ul style="list-style-type: none"> ➤ Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. ➤ Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. ➤ Avoid breathing dust and contact with eyes, skin and clothing. ➤ Do not ingest. Use personal protective equipment as required
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Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ➤ Keep in the original container ➤ Multi-ply paper bag with sealed plastic liner or heavy gauge plastic bag. Metal cans or metal drums, or plastic containers with plastic liners.
Storage incompatibility	<ul style="list-style-type: none"> ➤ Store in a cool, dry and well-ventilated place, out of direct sunlight. ➤ Keep container tightly closed when not in use - check regularly for leaks. ➤ Protect against physical damage. ➤ Keep away from incompatible materials

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

General	<p>Magnesium Oxide: Dust not otherwise classified, as inspirable dust ES TWA: 10mg/m³. Note: where heating or burning occurs, Worksafe Australia lists MgO fumes as a hazardous substance. MAK value: 6mg/m³ as magnesium oxide fumes. ES TWA: 10mg/m³. TLV TWA: 10mg/m³.</p> <p>Calcium Oxide: TLV TWA: 2mg/m³. ES TWA: 2mg/m³. MAK value 5mg/m³ – measured as the inhalable fraction of the aerosol. MAK Category 1 Peak Limitation: For local irritants.</p> <p>Silicon Dioxide: TLV TWA 0.1mg/m³ (respirable dust). ES TWA – none assigned. Notice of intended change: TLV TWA: 0.05mg/m³.</p>
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Exposure controls

Appropriate engineering controls	<p>A system of local and/or general exhaust is recommended to keep employee exposures as low as possible.</p> <p>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.</p> <p>Do not eat, drink or smoke when using this product.</p> <p>Always wash hands before smoking, eating, drinking or using the toilet.</p> <p>Wash contaminated clothing and other protective equipment before storage or re-use.</p>
Personal protection	
	<ul style="list-style-type: none"> ➤ Safety glasses with side shields ➤ Chemical goggles



Eye and face protection	<ul style="list-style-type: none"> ➤ 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
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

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	White to pink, crumbly powder	Relative density (Water = 1)	approx. 1.2 (H2O = 1)
Odour	Odourless	Auto ignition temperature	Not available
Odour threshold	Not Available	Decomposition temperature	Not available
pH	No data	Viscosity	Not available
Melting point (°C)	2600 °C	Molecular weight (g/mol)	Not available
Boiling point (°C)	3600 °C	Taste	Not available
Flash point (°C)	Not available	Explosive properties	Not explosive
Flammability	Not flammable	Volatile component (% vol)	None

SECTION 10 – STABILITY AND REACTIVITY

General Information	Stable under normal conditions of use.
Chemical stability	Stable under normal conditions of use.
Conditions to avoid	Avoid exposure to moisture.
Incompatible materials	No data
Hazardous Polymerisation	Hazardous polymerisation will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

General	Acute Inhalation Toxicity, LC50: No data available.
Inhalation	Not normally a hazard due to the non-volatile nature of the product. The dust is irritating to the upper respiratory tract
Ingestion	Regarded as practically non-toxic but may be harmful if swallowed in large quantity. Oral administration would generally result in purging (vomiting)
Skin	Skin contact may cause dryness. May cause mild irritation in the case of some individuals with sensitive skin
Eyes	Eye contact may cause mechanical irritation
Carcinogenicity	Not a known carcinogen
Reproductive Toxicity	None identified
Mutagenicity	Not suspected of causing genetic defects.



Chronic effects	None Known
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SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity	The product is not considered hazardous to the environment, but avoid any contamination of fresh waterways as good practice
Persistence/Degradability	Material is organic and would be expected to breakdown readily in the environment.
Bioaccumulation Potential	Material is organic by nature and would be expected to breakdown readily in the environment.
Environmental Impact	No information available

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	<ul style="list-style-type: none"> ➤ Do not allow wash water from cleaning or process equipment to enter drains ➤ It may be necessary to collect all wash water for treatment before disposal ➤ In all case disposal to sewer may be subject to local laws and regulations and these should be considered first ➤ If in doubt contact the responsible authority ➤ Contact manufacturer for recycling options or consult local or regional waste management authority for disposal
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SECTION 14 – TRANSPORT INFORMATION

Labels required

Marine Pollutant	No
HAZCHEM	Not classified as hazardous

Land transport (ADG) - Air transport (ICAO-IATA / DGR) - Sea transport (IMDG / GGVSee)

UN Number	No data available
Packing group	III
UN proper shipping name	No data available
Environmental hazard	No data available
Transport hazard classes	No data available
Special precautions for user	Transport upright in the original container with the lid tightly closed. Avoid spillage and any release into the environment

SECTION 15 – REGULATORY INFORMATION

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

GHS Codes	None
National Inventory	Status - Approved
Australia – AICS	Yes
Europe – EINEC / ELINCS / NLP	Yes
New Zealand – NZIoC	Yes - All ingredients are on the inventory
Environmental Protection Authority (New Zealand)	This product is exempt from registration, being an oral nutritional compound compliant with S4 of the ACVM regulations 2001
Approval Code	Non Hazardous



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

