Safety Data Sheet Kieserite

UPDATED: 21/01/2025

1. IDENTIFICATION AND SUPPLIER

1.1) Product Identifier

Product Name:	Kieserite
Synonym(s):	Magnesium Sulphate Monohydrate

1.2) Uses

Intended Use:	For Fertiliser

1.3) Supplier Details

Supplier Name:	Dickie Direct Ltd
Supplier Address:	25 Railway Rd, Whakatu, Hastings 4172
Supplier Contact:	0800 4 DICKIE (4 34254)
Supplier Website:	www.dickiedirect.co.nz

1.4) Emergency Contact Numbers

National Poisons Information Centre:	0800 POISON (764 766)
Emergency (In Storage):	0800 CHEMCALL (243 622)
Emergency (In Transit):	111 (Advise of Fire, Ambulance or Police)

2. HAZARDS IDENTIFICATION

2.1) Classification of Substance

Not considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.

2.2) Hazard Classification

Not classified as Hazardous Substance.

3. COMPOSITION INFORMATION

3.1) Substances and Mixtures

Ingredient:	Magnesium Sulphate
CAS NO:	14567-64-7
Content	100%

4. FIRST AID MEASURES

Eyes:	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by the National Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation:	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
Skin:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the National Poisons Information Centre or a doctor.
Ingestion:	For advice, contact the National Poison Information Centre 0800 764 766 or a doctor (at once). If swallowed, do not induce vomiting. Seek medical attention if symptoms persist.
First aid facilities:	Drinking water and eye-wash bottle should be available.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing Media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases (sulphur oxides, magnesium oxide) when heated to decomposition.

5.3 Advice for Firefighters

No fire or explosion hazard exists. Toxic gases may be evolved in a fire situation. Sulphur Oxides, Magnesium Oxide.

5.4 Hazchem Code

None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Ventilate area where possible.

6.2 Environmental precautions
Prevent product from entering drains and waterways.

6.3 Methods of cleaning
Contain spillage, then collect and place in suitable containers for disposal. Avoid generating dust.

6.4 Reference to other Sections
See Sections 8 and 13 for exposure controls and disposal.

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7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities
Store tightly sealed in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.

7.3 Specific end use(s)
Intended for use as a fertiliser.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards
No exposure standards have been entered for this product.

Biological limits
No biological limit values have been entered for this product.

8.2 Exposure controls

Engineering controls

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

PPE
Eye / Face
Wear dust-proof goggles.
Hands
Wear PVC or rubber gloves.
Body
When using large quantities or where heavy contamination is likely, wear coveralls.
Respiratory
At high dust levels, wear a Class P1 (Particulate) respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	White Crystalline Solid Round Granule
Odour:	Odourless
Flammability:	Non-Flammable
Flash Point	Not Relevant
Boiling Point	Not Relevant
Melting Point	Decomposition above 850°C
Evaporation Rate	Not Relevant
Ph	Not Relevant
Vapour Density	Not Available
Specific Gravity	1.003 kg/m^3(Bulk)
Vapour Pressure	Not Relevant
Upper Explosion Limit	Not Relevant
Lower Explosion Limit	Not Relevant
Partition Coefficient	Not Available
Autoignition Temperature	Not Available
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive Properties	Not Available
Oxidising Properties	Not Available
Odour Threshold	Not Available

9.2 Other information

Density	1.003 tonne/m^3 (Bulk)
% Volatiles	Not Relevant

10. STABILITY AND REACTIVITY

10.1) Chemical stability
Stable under recommended conditions of storage.

10.2) Possibility of hazardous reactions
Polymerization is not expected to occur.

10.3) Conditions to avoid
Avoid heat, sparks, open flames and other ignition sources.

10.4) Incompatible materials
Strong oxidisers.

10.5) Hazardous decomposition products
Sulphur oxides, Magnesium oxides.

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11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Health hazard summary
Not hazardous.

Eye
Low irritant. Contact may result in mild irritation, lacrimation and redness.

Inhalation
Low irritant. Over exposure may result in irritation of the nose and throat, with coughing (dust).

Skin
Low irritant. Prolonged or repeated contact may result in mild irritation, rash and dermatitis.

Ingestion
May be harmful. Ingestion may result in gastrointestinal irritation, nausea, vomiting, abdominal pain and diarrhoea. Oral LD50 (rat) is 2000 mg/kg.

Toxicity data
Magnesium Sulphate

LD50 (ingestion)	2000 mg/kg (rat)

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12. ECOLOGICAL INFORMATION

12.1) Hazard Classifications
Not hazardous.

13. DISPOSAL INFORMATION

13.1 Waste treatment methods

Product Disposal
Reuse or recycle where possible or apply excess product at recommended rates to appropriate land.

Packaging (Bulk Bag) Disposal
Ensuring bulk bags are completely empty and recycle where possible.

14. TRANSPORT INFORMATION

UN Number:	None Allocated
Proper Shipping Name:	None Allocated
Hazard Class:	None Allocated
Packing Group:	None Allocated

15. REGULATORY INFORMATION

15.1) Regulatory Publications Referencing Ammonium Sulphate
New Zealand Inventory of Chemicals
New Zealand HSNO Act

16. OTHER INFORMATION

Additional information

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

EXPOSURE STANDARD: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude

conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.