Safety Data Sheet
according to WHS Regulations

Printing date 05.04.2018 Version number 1 Revision: 05.04.2018

1 Identification

· **Product identifier**

· **Trade name: Kieserite**

· **Article number:** DK048
· **CAS Number:**
14168-73-1
· **EC number:**
231-298-2
· **Relevant identified uses of the substance or mixture and uses advised against**
For use in the agricultural sector.
· **Article category** Fertilzer chemical
· **Technical function** Fertilizers (soil amendments)
· **Application of the substance / the mixture** Agricultural chemicals
· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Company: Omnia Specialities Australia Pty Ltd
Address: Tramway Road
MORWELL VIC 3840
Telephone Number: +61-3 5133 9118
Facsimile Number: +61-3 5133 9114

· **Further information obtainable from:** info@omnia.net.au
· **Emergency telephone number:**
ISS First Response
03 8769 3688

2 Hazard(s) Identification

· **Classification of the substance or mixture**
The substance is not classified according to the Globally Harmonised System (GHS).

· **Label elements**
· **GHS label elements** Void
· **Hazard pictograms** Void
· **Signal word** Void
· **Hazard statements** Void
· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition and Information on Ingredients

· **Chemical characterisation: Substances**
· **CAS No. Description**
14168-73-1 Kieserite
· **Identification number(s)**
· **EC number:** 231-298-2

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4 First Aid Measures

· **Description of first aid measures**
· **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
No special measures required.
· **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Remove to fresh air.In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately rinse with water.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:**
Call for a doctor immediately. Do not induce vomiting. Rinse mouth with water (only if person is conscious).
· **Information for doctor:**
Treat supportive and symptomatically
Monitor for shock and treat
· **Most important symptoms and effects, both acute and delayed**
Nausea
Vomiting
Breathing difficulty
· **Indication of any immediate medical attention and special treatment needed** Collapse

5 Fire Fighting Measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
Use fire extinguishing methods suitable to surrounding conditions. Water spray jet, foam. Dry fire-extinguishing substance.
· **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Metal oxide fumes
Sulphur oxides (SOx)
· **Advice for firefighters** Material not combustable
· **Protective equipment:** Mouth respiratory protective device.

6 Accidental Release Measures

· **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water. Should not be released into the environment.
· **Methods and material for containment and cleaning up:**
Pick up mechanically, sweep and shovel into containers. Re-use if not contaminated
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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7 Handling and Storage

· **Handling:**
· **Precautions for safe handling**
Store in cool, dry place in tightly closed receptacles.
Do not eat, drink or smoke in the work place.
Wash hands before breaks and after handling the product.
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
· **Information about fire - and explosion protection:**
Product not combustable. Take precaution for surrounding fire
Keep ignition sources away - Do not smoke.
Protect from heat.
Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities** Will heatup in contact with water
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Observe the rules usually applicable when handling chemicals.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Keep container tightly sealed in a dry well-ventilated place.
Protect from heat and direct sunlight.
· **Specific end use(s)** Agricultural

8 Exposure controls and personal protection

· **Additional information about design of technical facilities:**
Ensure eyewash stations and safety showers are close to the workstation location.

· **Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:** Not required.
· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Do not eat, drink, smoke or sniff while working.
Do not ingest
Keep away from foodstuffs, beverages and feed.
· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:**
Avoid eye contact with this material. As a minimum safety glasses with side shields should be worn. If potential for dust exposure exists, dust resistant chemical safety goggles should be worn additionally.
· **Body protection:** Protective work clothing

9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Crystals, granular or powder
Colour:	White to off-white
· **Odour:**	Odourless
· **Odour threshold:**	Not determined.
· **pH-value:**	9
· **Change in condition**	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
· **Flash point:**	Not applicable.
· **Flammability (solid, gas):**	Not applicable.
· **Ignition temperature:**	
Decomposition temperature:	Not determined.
· **Auto-ignition temperature:**	Not determined.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure:**	Not determined.
· **Density at 20 °C:**	2.6 g/cm³
· **Bulk density:**	900-1,400 kg/m³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water at 20 °C:**	340 g/l
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Other information**	No further relevant information available.

10 Stability and Reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** Avoid extreme temperatures.

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· **Incompatible materials:** Heat
· **Hazardous decomposition products:**
Metal oxide fumes
Sulphur oxides (SOx)

11 Toxicological Information

· **Information on toxicological effects**
· **Acute toxicity**

· **LD/LC50 values relevant for classification:**		
Oral	LD50	>2,000 mg/kg (rat)
Inhalative	LC50 4 h	>2,000 mg/l (rabbit)

· **Primary irritant effect:**
· **Skin corrosion/irritation** No irritant effect.
· **Serious eye damage/irritation** Irritating effect.
· **Respiratory or skin sensitisation** No sensitising effects known.
· **Additional toxicological information:**
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
The substance is not subject to classification according to the latest version of the EU lists.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.

12 Ecological Information

· **Toxicity**

· **Aquatic toxicity:**	
EC50	2,700 mg/kg (Algae)
	343.56 mg/kg (Daphnia magnus)
LC50 96 hours	2,820 mg/L (Pimephales promelas (Fathead Minnow))

· **Persistence and degradability** No further relevant information available.
· **Behaviour in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** Soluble in water
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation**
This product is used as fertiliser. However, large spills can kill vegetation. Prevent large quantities from entering waterways. If uncontaminated, sweep up or collect, and reuse as product. If contaminated with other materials, collect in suitable containers.
On the basis of the necessary technical regulations and after consultation with the disposal agent and the relevant authorities, can be disposed of with domestic waste or incinerated with domestic waste.

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Disposal must be made according to official regulations

Smaller quantities can be disposed of with household waste.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· **UN-Number**	
· **ADG, ADN, IMDG, IATA**	Void
· **UN proper shipping name**	
· **ADG, ADN, IMDG, IATA**	Void
· **Transport hazard class(es)**	
· **ADG, ADN, IMDG, IATA**	
· **Class**	Void
· **Packing group**	
· **ADG, IMDG, IATA**	Void
· **Environmental hazards:**	Not applicable.
· **Special precautions for user**	Not applicable.
· **ERG No.**	None
· **Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	Void

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Australian Inventory of Chemical Substances** Substance is listed.
· **Standard for the Uniform Scheduling of Medicines and Poisons** Substance is not listed.
· **GHS label elements** Void
· **Hazard pictograms** Void
· **Signal word** Void
· **Hazard statements** Void
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative