



SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name CAMPBELLS MAGNESIUM NITRATE (NITRO-MAG)
Synonyms MAGNESIUM NITRATE (NITRO-MAG) • MAGNESIUM NITRATE, HEXAHYDRATE • MAGNESIUM(II) NITRATE HEXAHYDRATE • NITRIC ACID, MAGNESIUM(II) SALT • NITRO-MAG

1.2 Uses and uses advised against

Uses FERTILISER

1.3 Details of the supplier of the product

Supplier name CAMPBELLS FERTILISERS AUSTRALASIA PTY LTD
Address 18 Raymond Rd, Laverton North, Victoria, 3026, AUSTRALIA
Telephone (03) 9931 2211
Fax (03) 9931 2201
Email info@campbellsfert.com.au
Website www.campbellsfert.com.au

1.4 Emergency telephone numbers

Emergency (03) 9931 2211 (9am - 5pm Monday - Friday)
Emergency 0418 350 726 (At all other times)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

2.2 GHS Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
MAGNESIUM (II) NITRATE, HEXAHYDRATE	13446-18-9	603-823-9	99%
WATER	7732-18-5	231-791-2	1%

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a 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 a Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).

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First aid facilities Eye wash facilities and safety shower are recommended.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

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 (ammonia, nitrogen oxides) may be evolved when heated to decomposition.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

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. Clear area of all unprotected personnel. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

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 in a cool, dry, well ventilated area, removed from incompatible substances. Do not allow to come in contact with water, either from rain, condensation or the surface on which stored. Bagged fertilisers should be stored under cover and out of direct sunlight (which degrades woven polypropylene packs). If stored in the open, do so for short periods only, and cover with a tarpaulin. If stacking is necessary, bulk bags should be stored in a stable manner, preferably in a pyramidal style. Bulk bags should not be stacked more than two high for bags containing 1 000 kg or more, or more than four high for bags containing up to 500 kg. The Pallet Capacity Rating (design weight) should not be exceeded on the bottom tier for other packs. High stacking should be avoided as pressure promotes caking. Store away from farm chemicals, e.g. insecticides, fungicides and herbicides.

7.3 Specific end uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

No exposure standards have been entered for this product.

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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. Use appropriate safe working procedures to reduce the potential for an inhalation hazard.

PPE

Eye / Face	Wear dust-proof goggles.
Hands	Individuals with sensitive skin should consider wearing PVC or rubber gloves.
Body	Not required under normal conditions of use.
Respiratory	Where an inhalation risk exists, wear a Class P1 (Particulate) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	WHITE OR YELLOW SOLID
Odour	CHARACTERISTIC ODOUR
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	95°C
Evaporation rate	NOT AVAILABLE
pH	5 to 7.5
Vapour density	NOT AVAILABLE
Specific gravity	1.46
Solubility (water)	SOLUBLE
Vapour pressure	NOT AVAILABLE
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

Bulk density	900 kg/m ³ to 1100 kg/m ³
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10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

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10.5 Incompatible materials

Incompatible with combustible materials, and reducing agents (e.g. sulphites).

10.6 Hazardous decomposition products

May evolve toxic gases (ammonia, nitrogen oxides) may be evolved when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
MAGNESIUM (II) NITRATE, HEXAHYDRATE	5440 mg/kg (rat)	--	--

Skin Contact may result in irritation, redness, rash and dermatitis.
Eye Contact may result in irritation, lacrimation, pain and redness.
Sensitisation Not classified as causing skin or respiratory sensitisation.
Mutagenicity Not classified as a mutagen.
Carcinogenicity Not classified as a carcinogen.
Reproductive Not classified as a reproductive toxin.
STOT - single exposure Over exposure may result in irritation of the nose and throat, with coughing.
STOT - repeated exposure Not classified as causing organ damage from repeated exposure. Over exposure to nitrates may result in methaemoglobinemia (inability of the blood to transport oxygen) with symptoms including cyanosis (bluish discolouration of the skin and mucous membranes) headache, dizziness, fatigue, heart and thyroid damage. However, due to the product form and nature of use, the risk of adverse health effects may be reduced.
Aspiration Not classified as causing aspiration.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Magnesium nitrate hexahydrate:
There is no direct test for magnesium nitrate. The data is based on studies of similar substances.
LC50 for freshwater fish: 1378 mg/l
EC50/LC50 for freshwater invertebrates: 490 mg/l
EC50/LC50 for freshwater algae: > 1700 mg/l
EC10/LC10 or freshwater algae NOEC: 1700 mg/l
EC50/LC50 aquatic microorganisms: > 1000 mg/l
EC10/LC10 or NOEC aquatic organisms: 180 mg/l
PNEC aqua (water freshwater): 0.45 mg/l
PNEC aqua (sea water): 0.045 mg/l
PNEC (broken version): 4.5 mg/l

12.2 Persistence and degradability

Decomposition under anaerobic conditions in wastewater treatment plants.

12.3 Bioaccumulative potential

Low potential to bioaccumulate.

12.4 Mobility in soil

Freely soluble in water. Very quickly penetrates into the groundwater.

12.5 Other adverse effects

Plant nutrients may be beneficial to plants at low levels, however high levels may cause reduced growth or burns in sensitive species. Excess may be washed through soil to waterways. Nutrients released to waterways may cause algal blooms, with potential for toxic effects on aquatic organisms.

13. DISPOSAL CONSIDERATIONS

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13.1 Waste treatment methods

Waste disposal Dispose of to an approved landfill or waste processing site. Contact the manufacturer/supplier for additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None allocated.	None allocated.	None allocated.
14.2 Proper Shipping Name	None allocated.	None allocated.	None allocated.
14.3 Transport hazard class	None allocated.	None allocated.	None allocated.
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

Not a Marine Pollutant

14.6 Special precautions for user

Hazchem code None allocated.

15. REGULATORY INFORMATION

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

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

Inventory listings **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**
All components are listed on AICS, or are exempt.

16. OTHER INFORMATION

Additional information EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: 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 form of product, 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: form of product; 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 report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

