



Material Safety Data Sheet

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Infosafe No. LPWF4 Issue Date : June 2007 ISSUED by SCOTSAU

Product Name : **STEP HI MAG**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name STEP HI MAG
Product Code 4486
Company Name SCOTTS AUSTRALIA PTY LTD
Address 11 Columbia Way Baulkham Hills
NSW 2153 Australia
Emergency Tel. 1800 033 111
Telephone/Fax Number Tel: (02) 8853 7300
Fax: (02) 8853 7310
Recommended Use Granulated fertiliser

2. HAZARDS IDENTIFICATION

Hazard Classification Australia:
Classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
New Zealand:
Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Classified as Dangerous Goods for transport, according to the New Zealand Standard NZS 5433:1999 Transport of Dangerous Goods on Land.
HSNO classification:
6.1D - Substance that is moderate acutely toxic.
6.3A - Substance that is irritating to the skin.
6.9A - Substance that is toxic to human target organs or systems.
8.3A - Substance that is corrosive to ocular tissue.
9.1B - Substance that is ecotoxic in the aquatic environment.
9.3C - Substance that is harmful to terrestrial vertebrates.

Hazard statement code:
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H372 Causes damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
H433 Harmful to terrestrial vertebrates.

Precautionary statement codes- prevention:
P102 Keep out of reach of children.
P103 Read label before use.
P104 Read Safety Data Sheet before use.
P260 Do not breathe dust.
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/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.

Precautionary statement codes- Response:
P101 If medical advice is needed, have product container or label at hand.
P301+P312 IF SWALLOWED: Call a POISON CENTER 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.
P310 Immediately call a POISON CENTER or doctor/physician.
P314 Get medical advice/attention if you feel unwell.
P330 Rinse mouth.
P331 Do NOT induce vomiting.



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P332+P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before re-use.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.

Precautionary statement codes - Storage:
P405 Store locked up.

Precautionary statement codes - Disposal:
P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

Risk Phrase(s) R22 Harmful if swallowed.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrase(s) S45 In case of accident or if you feel unwell seek medical advice immediately
S61 Avoid release to the environment. Refer to special instructions/safety data sheet.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	Other ingredients determined not to be hazardous		60-100 %
	Magnesium oxide	1309-48-4	10-30 %
	Iron (II) Sulfate	7720-78-7	0->25 %
	Manganese (II) sulphate monohydrate	7785-87-7	0-10 %
	Copper sulphate	7758-98-7	0-5 %
	Zinc sulphate mono hydrate	7446-19-7	1-5 %

4. FIRST AID MEASURES

Inhalation	If prolonged inhalation of dust occurs, remove from contaminated area. Apply artificial respiration if not breathing. If symptoms develop seek medical attention.
Ingestion	If swallowed, do NOT induce vomiting. Wash out mouth with water. If symptoms develop seek medical attention.
Skin	Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. If symptoms develop seek medical attention.
Eye	If contact with the eye(s) occurs, wash with copious amounts of water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If symptoms persist seek medical attention.
First Aid Facilities	Eye wash station, safety shower and normal washroom facilities.
Advice to Doctor	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use water spray, mist or foam.
Hazards from Combustion Products	Under fire conditions this product may emit toxic and/or irritating fumes including carbon monoxide and carbon dioxide.
Hazchem Code	2X
Precautions in connection with Fire	Fire-fighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode.
Unsuitable Extinguishing Media	Sand



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6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, and then transfer material to a suitable container. Use absorbent paper dampened with water to pick up remaining material. Wash surfaces well, with soap and water. Seal all wastes in vapour tight labelled plastic containers for eventual disposal. Dispose of waste according to federal, Environmental Protection Authority and state regulations. If the spillage enters the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.

7. HANDLING AND STORAGE

Precautions for Safe Handling Avoid generating dust. Use with adequate ventilation. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Wear appropriate protective equipment to prevent inhalation, skin and eye contact. Ensure a high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking, smoking or using the toilet.

Conditions for Safe Storage Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store in labelled containers. Keep containers tightly closed. Store away from water and incompatible materials. Have appropriate fire extinguishers available in and near the storage area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards The exposure standard for dust not otherwise specified is 10 mg/m³ (for inspirable dust) and 3 mg/m³ (for respirable dust). The limit applies to both Australia and New Zealand.

Australian National Occupational Health And Safety Commission (NOHSC) Exposure Standards:

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Magnesium oxide (fume)	-	10	-	-

New Zealand Occupational Safety and Health Service (OSH) Workplace Exposure Standards:

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Magnesium oxide (fume)	-	10	-	-

Biological Limit Values No biological limit allocated.

Engineering Controls Use with good general ventilation. If dusts are produced local exhaust ventilation should be used.

Respiratory Protection Not required. During industrial applications: Where ventilation is inadequate the use of an Air Purifying Respirator with a Organic Vapour filter complying with AS/NZS 1715 and AS/NZS 1716 is recommended.

Eye Protection The use of chemical goggles or safety glasses with side shield protection is recommended. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection Where skin contact is likely to be prolonged or repeated impervious PVC or nitrile rubber gloves are recommended.

Body Protection Overalls or similar protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Brownish grey granulate.

Odour Not available.

Melting Point Not available.

Boiling Point Not applicable.

Solubility in Water Slight.

Specific Gravity Not available.

pH Value Not available.

Vapour Pressure Not applicable.



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Product Name : **STEP HI MAG**

Vapour Density (Air=1) Not applicable.
Density Bulk: 1350 kg/m³
Flash Point Not applicable.
Auto-Ignition Temperature Not available.
Flammable Limits - Lower Not applicable.
Flammable Limits - Upper Not applicable.

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions of use.
Conditions to Avoid Heat, direct sunlight, open flames or other sources of ignition.
Incompatible Materials Not available.
Hazardous Decomposition Products Thermal decomposition may result in the release of toxic and/or irritating fumes.
Hazardous Polymerization Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information Ironsulphate:
LD50 (oral, rat): 1389 mg/kg
Copper sulphate:
LD50 (oral, rat): 960 mg/kg
Inhalation Inhalation of dust may cause irritation to the mucous membrane and upper airways.
Ingestion Harmful if swallowed. Ingestion of this product will irritate the gastric tract causing nausea and vomiting.
Skin Skin contact may cause mechanical irritation resulting in redness and itching.
Eye Eye contact may cause mechanical irritation. May result in mild abrasion.
Chronic Effects Prolonged or repeated skin contact may cause defatting leading to dermatitis.

12. ECOLOGICAL INFORMATION

Ecotoxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Zinc sulphate monohydrate:
EC50/48h/daphnia= 1.7 mg/l
Manganese sulphate:
EC50/48h/daphnia= >100 mg/l
Ironsulphate:
EC50/48h/daphnia= >100mg/l
LC50/96h/rainbow trout = >72.5mg/l (6d)
EC50/72h/algae= 22mg/l
Copper sulphate:
EC50/48h/daphnia= 0.8 mg/l
Persistence / Degradability No data is available for this material.
Mobility No data is available for this material.
Environ. Protection Do not allow product to enter drains, waterways or sewers.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations.



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14. TRANSPORT INFORMATION

Transport Information Australia:
This material is classified as a Class 9 (Miscellaneous Dangerous Goods) Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Dangerous goods of Class 9 (Miscellaneous Dangerous Goods) are incompatible in a placard load with any of the following:
- Class 1, Explosive
- Class 5.1, if the Class 9 substance is a fire risk substance
- Class 5.2, if the Class 9 substance is a fire risk substance
New Zealand:
This material is classified as a Class 9 - Miscellaneous Substance according to NZS 5433:1999 Transport of Dangerous Goods on Land.
Must not be loaded in the same freight container or on the same vehicle with:
- Class 1, Explosives
Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices with:
(Note 3; Segregation devices may be used as to segregate dangerous goods of Class 9 when the nature of those dangerous goods requires them to be segregated from dangerous goods of);
- Class 3, Flammable liquids
- Class 4.1, Flammable solids
- Class 4.2, Spontaneously combustible substances
- Class 4.3, Dangerous when wet substances
- Class 5.1, Oxidising substances
- Class 5.2, Organic peroxides
- Class 6.1, Toxic substances
- Class 6.2, Infectious substances
- Class 8, Corrosive substances
And are incompatible with food and food packaging in any quantity.

U.N. Number 3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. - (CONTAINS IRON SULPHATE, MANGANESE SULPHATE)

DG Class 9

Hazchem Code 2X

Packaging Method 3.8.9

Packing Group III

EPG Number 9C1

IERG Number 47

15. REGULATORY INFORMATION

Regulatory Information Australia:
Classified as hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC).

New Zealand:
Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Group Standard:
Fertilisers (Subsidiary Hazard) Group Standard 2006
HSNO Approval Number: HSR002571

Poisons Schedule Not Scheduled

Hazard Category Harmful, Dangerous for the environment

16. OTHER INFORMATION

Date of preparation or last revision of MSDS MSDS created: May 2007.

Contact Person/Point New Zealand:
180c Great South Rd
Takanini, Auckland



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Product Name : **STEP HI MAG**

Phone: (09) 299 6558
Fax: (09) 296 0186
Emergency Tel: 0800 734 607
...End Of MSDS...