

Gro-Mn

HAZARDOUS, DANGEROUS GOODS

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name:	Gro-Mn
Recommended use:	Manganese supplement for agricultural applications.
Supplier:	Grochem (AgriNova New Zealand Limited)
Company No.:	9429036821501
Street Address:	15 Sunlight Grove Porirua New Zealand
Telephone:	+64 4 237 0905
Email:	grochem@grochem.com
Emergency telephone:	New Zealand 0800 CHEMCALL - 24 hours (0800 243 6225) Australia 1800 127 406 Other locations +64 4 917 9888 or The National Poisons Centre 0800 POISON (0800 764 766)
Issue date:	23 September 2020

2. HAZARDS IDENTIFICATION

This material is hazardous according to criteria of EPA New Zealand.

EPA Group Standard: HSR002571 - Fertilisers (Subsidiary Hazard) Group Standard



Signal Word:	Danger
Hazard Classifications:	6.9A - (Single exposure) - Substances that are toxic to human target organs or systems 9.1B - Substances that are ecotoxic in the aquatic environment (H411)
Hazard Statements:	H370 - Causes damage to organs. H411 - Toxic to aquatic life with long lasting effects.
Prevention Precautionary Statements:	P102 - Keep out of reach of children. P103 - Read label before use. P260 - Do not breathe dust, fume, gas, mist, vapours or spray. P264 - Wash hands, face and all exposed skin thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P273 - Avoid release to the environment.
Response Precautionary Statements:	P101 - If medical advice is needed, have product container or label at hand. P307+P311 - IF exposed: Call a POISON CENTRE or doctor/physician. P321 - Specific treatment (see product label). P391 - Collect spillage.

Storage Precautionary Statement:	P405 - Store locked up.
Disposal Precautionary Statement:	P501 - Dispose of contents/container in accordance with local, regional, national and international regulations.
Dangerous Good Classification:	Classified as Dangerous Goods by the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail and the New Zealand NZS5433: Transport of Dangerous Goods on Land.
Dangerous Goods Class:	9

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Sulfuric acid, manganese (2+) salt (1:1), monohydrate	10034-96-5	20-25 % (w/w)
Ingredients determined to be Non-Hazardous		Balance 100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation:	Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.
Skin Contact:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.
Eye contact:	If in eyes wash out immediately with water. In all cases of eye contamination, it is a sensible precaution to seek medical advice.
Ingestion:	Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

PPE for First Aiders: Wear overalls, gloves, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem Code:	3Z
Suitable extinguishing media:	If material is involved in a fire use alcohol resistant foam or dry agent (carbon dioxide, dry chemical powder).
Specific hazards:	Non-combustible material.
Firefighting further advice:	Not applicable.

6. ACCIDENTAL RELEASE MEASURES

Small Spills:	Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.
Large Spills:	Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods - Initial Emergency Response Guide No:

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7. HANDLING AND STORAGE

Handling:	Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols.
Storage:	Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store locked up. Keep container standing upright. Keep containers closed when not in use – check regularly for leaks.
	This material is classified as a Class 9 Miscellaneous Dangerous Good as per the criteria of the “New Zealand NZS5433: Transport of Dangerous Goods on Land” and/or the “Australian Code for the Transport of Dangerous Goods by Road & Rail” and must be stored in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:	No value assigned for this specific material by WorkSafe New Zealand.
Biological Limit Values:	As per the WorkSafe New Zealand the ingredients in this material do not have a Biological Limit Allocated.
Engineering Measures:	Natural ventilation should be adequate under normal use conditions.
Personal Protection Equipment:	OVERALLS, GLOVES, SAFETY GLASSES, RESPIRATOR. Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted. Wear overalls, gloves, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.
Hygiene measures:	Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Clear Liquid	Solubility:	Soluble in water
Colour:	Pale pink	Specific Gravity:	1.25
Odour:	Mild	pH:	6.5 typ

10. STABILITY AND REACTIVITY

Chemical stability:	This material is thermally stable when stored and used as directed.
Conditions to avoid:	Elevated temperatures and sources of ignition.
Incompatible materials:	Oxidising agents.
Hazardous decomposition products:	Oxides of carbon and nitrogen, smoke and other toxic fumes.
Hazardous reactions:	No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation:	Material may be an irritant to mucous membranes and respiratory tract.
Skin contact:	Contact with skin may result in irritation.

Ingestion: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.
 Eye contact: May be an eye irritant.

Acute toxicity

Inhalation: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): LC50 > 20.0 mg/L for vapours or LC50 > 5.0 mg/L for dust and mist or LC50 > 5,000 ppm gas
 Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >5,000 mg/Kg bw
 Ingestion: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >5,000 mg/Kg bw
 Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as not corrosive or irritating to skin.
 Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.
 Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure):

This material has been classified as a 6.9A - Substances that are toxic to human target organs or systems.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.
 Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation):

This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure):

This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

Long-term aquatic hazard: This material has been classified as a 9.1B - Substances that are ecotoxic in the aquatic environment. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): 1 - 10 mg/L, where the substance is not rapidly degradable and/or BCF ≥ 500 and/or log Kow ≥ 4.

Ecotoxicity in the soil environment: This material has been classified as non-hazardous.

Ecotoxicity to terrestrial vertebrates: This material has been classified as non-hazardous.

Ecotoxicity to terrestrial invertebrates: This material has been classified as non-hazardous.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible, material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION**ROAD AND RAIL TRANSPORT:**

Classified as Dangerous Goods by the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail and the New Zealand NZS5433: Transport of Dangerous Goods on Land.



UN No:	3082
Dangerous Goods Class:	9
Packing Group:	III
Hazchem Code:	3Z
Emergency Response Guide No:	47
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Segregation Dangerous Goods:

Not to be loaded with explosives (Class 1). Note 1: Materials that are fire risks are incompatible with oxidising agents (Class 5.1) or organic peroxides (Class 5.2). Exemptions may apply.

MARINE TRANSPORT:

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.



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AIR TRANSPORT:

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.



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15. REGULATORY INFORMATION

All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC).

EPA Group Standard: HSR002571 – Fertilisers (Subsidiary Hazard) Group Standard

Approved handler:	No
Location test certificate:	No
Fire extinguishers:	No
Signage:	Yes (≥ 1000L)
Emergency response:	Yes (≥ 1000L)
Secondary containment:	Yes (≥ 1000L)
Hazardous atmosphere zone:	No
Max amount permitted on a passenger service vehicle:	5L

16. OTHER INFORMATION

Reason for issue: 5 yearly revision

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.

This SDS summarises our best knowledge of the health and safety hazard information available for this product and how to safely handle and use it. Since the use of this information and the conditions of the use of this product are not under the control of GroChem, it is the user's responsibility to determine conditions of safe use of the product.