

SAFETY DATA SHEET

VALAGRO BREXIL Mn

Date of Issue: December 2016

1. IDENTIFICATION

Product Identifier:	VALAGRO BREXIL Mn
Other Means of Identification:	None
Recommended Use of the Chemical and Restrictions on Use:	Fertiliser
Details of Manufacturer or Importer:	Campbells Fertilisers Australasia 18 Raymond Road, Laverton North, Victoria, 3026 Phone: (03) 9931 2211 Fax: (03) 9931 2201 www.campbellsfert.com.au
Emergency Telephone Number:	(03) 9931 2211 (business hours only 8.30 am to 5.00 pm) 0418 350 726 (after business hours) Poisons Information Centre 131126

2. HAZARD(S) IDENTIFICATION



Pictograms: Health Hazard, Corrosion

GHS Hazard Class and Category:

Eye Damage/Irritation – category 1: “Danger”

H318 Causes serious eye damage

Specific target Organ Toxicity (Repeated Exposure) – category 2: “Warning”

Hazard statement: H373 May cause damage to the brain through prolonged or repeated exposure per inhalation

Precautionary Statements:

Prevention

Do not breathe dust/fume/gas/mist/vapours/spray

Wear eye safety goggles and face shield. Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Response

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 CENTRE/doctor

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P314 Get medical advice/attention if you feel unwell
P391 Collect spillage

Storage

No relevant statements

Disposal

P501 Dispose of contents/container in accordance with local/regional/national regulations.

ADG Based on available information, not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition refer section 14.
Classification:

SUSMP Schedule 6
Classification:

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component:	CAS Number:	Proportion (%):
Manganese sulphate	7785-87-7	25 - 30

4. FIRST AID MEASURES

Description of Necessary First Aid Measures:

Inhalation: Remove casualty to fresh air and keep warm and at rest.

Skin Contact: Take off immediately all contaminated clothing and dispose of safely. Rinse immediately and abundantly with running water and soap the contaminated body parts, even if only suspected of contact. If irritation develops, get medical attention.

Eye Contact: Rinse immediately and abundantly with water for a sufficient length of time. Eyelids should be held away from the eyeball to ensure thorough rinsing. Consult an ophthalmologist immediately. Protect uninjured eye.

Ingestion: Never give anything by mouth to an unconscious person. If person is conscious, rinse mouth with water and then give plenty of water to drink. Do not induce vomiting unless instructed to do so by medical personnel. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

First Aid Facilities: Ensure washing facilities, including an eyewash, are available and maintained. Ensure first aider uses individual protection equipment (gloves, safety goggles, protective clothing).

Symptoms caused by Exposure: No data available for the mixture. Possible symptoms that may occur:

Inhalation: May cause irritation to the respiratory tract. Cough, shortness of breath.

Skin: May cause irritation to the skin. Redness, itching, pain.

Eye: Causes serious eye damage. Pain, redness.

Ingestion: The product dissolved in water or in presence of moisture, causes an acid reaction and if swallowed can cause irritation and burns of the

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mouth, throat and digestive tract. Vomiting, abdominal pain, gastrointestinal disorders.

Medical Attention and Special Treatment:

In case of accident or if feeling unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Equipment:	Water spray, foam, carbon dioxide (CO ₂)
Specific Hazards arising from the Chemical:	Do not inhale explosion and combustion gases. Burning produces smoke containing carbon oxides, nitrogen oxides, sulphur oxides, metal oxides
Special Protective Equipment and Precautions for Fire Fighters:	Use suitable breathing apparatus, protective clothing, eye protection and gloves resistant to chemicals according to EN469. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:	<p><u>For non-emergency personnel:</u></p> <ul style="list-style-type: none"> -No action shall be taken involving any personal risk or without suitable training. -Wear protective clothes giving total skin protection, PVC gloves, safety glasses and mask with filter P2. -Keep people not involved in the emergency intervention away from the affected area. -Ensure adequate ventilation, move people to a safe place. -Alert the internal emergency team <p><u>For emergency responders:</u></p> <ul style="list-style-type: none"> -Wear protective clothes giving total skin protection, PVC gloves, safety glasses and mask with filter P2. -Ensure adequate ventilation, move people to a safe place. -See protective measures in sections 7 and 8. -Avoid dust generation -Dusts at sufficient concentrations can form explosive mixtures with air. -Avoid any accumulation of electrostatic charge which may create a hazardous condition and cause an ignition.
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Environmental Precautions:	Do not allow to enter soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose of it in an approved landfill. If possible collect in clean plastic containers labelled and reuse as fertilizer. In case of gas escape or of entry into waterways, soil or drains, notify the relevant authorities. Suitable material for absorption: absorbing material, earth, sand.
Methods and Materials for Containment and Cleaning Up:	Collect the product, for example, using shovel and broom. Avoid raising dust. Wash with plenty of water, contain the spill with absorbent material, earth, sand.

7. HANDLING AND STORAGE

Precautions for Safe Handling:	Avoid contact with skin and eyes, inhalation of vapours and mists. Do not use empty containers before they have been cleaned. Before making transfer operations, ensure there are not any incompatible material residuals in the containers. Contaminated clothing should be changed before entering eating areas. Do not eat or drink while working.
Conditions for Safe Storage, including any Incompatibilities:	Keep in original containers tightly closed in a well-ventilated place far from humidity, heat and ignition sources. Avoid exposure to direct sunlight. Keep away from food, drink and feed. Incompatible materials: strong acids and bases, oxidizing and reducing agents. Ensure storage premises are adequately ventilated, cool and dry.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:	<p><i>Manganese sulphate:</i> Exposure limit Manganese TWA 0.2 mg/m³ Critical effect: central nervous system</p> <p>Workers: DNEL skin = 0.00414 mg/kg/day DNEL inhalation = 0.2 mg/kg/day</p> <p>Population: DNEL skin = 0.0021 mg/kg/day DNEL inhalation = 0.043 mg/m³</p> <p>Environment: PNEC water (fresh water) = 0.0128 mg/L PNEC water (sea water) = 0.0004 mg/L PNEC water (intermittent emissions) = 0.03 mg/L PNEC STP = 56 mg/L PNEC sediment (fresh water) = 0.0114 mg/kg dw sediment PNEC sediment (sea water) = 0.00114 mg/ kg dw sediment PNEC soil = 25.1 mg/kg soil dw</p>
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Biological Monitoring:	Not available
Control Banding:	Not available
Engineering Controls:	Not available
Individual Protection Measures e.g. Personal Protective Equipment (PPE):	<p><i>Respiratory Protection:</i> In case of dust generation, use dust mask with P2 filters according to the standard EN149:2001. The powder exposition limit must be respected.</p> <p><i>Skin Protection:</i> Wear protective clothing. Wear PVC gloves with long cuffs according to the standard EN374.</p> <p><i>Eye Protection:</i> Use close-fitting safety goggles according to the standard EN166. Do not use contact lenses.</p> <p><i>Thermal Hazards:</i> None known.</p>

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown microgranules
Odour:	Coffee
Vapour Pressure:	Not applicable, solid
Apparent Density:	0.6 – 0.7 kg/dm ³
Vapour Density:	Not applicable, solid
Boiling Point:	Not applicable, solid
Melting Point:	No data available
Solubility (in water):	400 g/L at 20°C
pH 1% at 20°C	3.3
Flash Point:	Not applicable, solid
Flammability (explosive) Limits:	Not applicable, product does not contain any flammable or explosive substance
Auto-Ignition Temperature:	No data available
Octanol/Water Partition Coefficient:	No data available
Thermal decomposition:	No data available
Conductivity:	No data available

10. STABILITY AND REACTIVITY

Reactivity:	Product is stable under normal conditions of storage.
Chemical Stability:	Product is stable under normal conditions of storage.
Possibility of Hazardous	The product can release gaseous ammonia if in contact with alkaline substances such as lime

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Reactions:	
Conditions to Avoid:	Avoid heating the product at high temperatures. Avoid dust generation. Dusts at sufficient concentrations can form explosive mixtures with air. Avoid any accumulation of electrostatic charge which may create a hazardous condition and cause an ignition.
Incompatible Materials:	Avoid contact with strong acids and bases, oxidizing and reducing agents. The product can release gaseous ammonia if in contact with alkaline substances such as lime.
Hazardous Decomposition Products:	Does not decompose when used for intended uses. In case of fire and high temperatures, can develop carbon oxides, nitrogen oxides, sulphur oxides, meal oxides.

11. TOXICOLOGICAL INFORMATION

Toxicological Information of the Mixture: No data available

Toxicological Information of the Main Substances in the Mixture:

Skin Corrosion/Irritation:	<i>Manganese sulphate</i> <i>In vivo</i> test on rabbit OECD 404: Not irritating – Ref Pooles (2010) <i>Zinc sulphate</i> Not irritant (Van Huygevoort 1999b; Lansdown 1991)
Serious Eye Damage/Irritation:	<i>Manganese sulphate</i> Test <i>in vivo</i> : irreversible eye damage (test based on one rabbit)
Respiratory or Skin Sensitisation:	<i>Manganese sulphate</i> Skin: no sensitizing according to OECD 429 Respiratory system: no data available
Germ Cell Mutagenicity:	<i>Manganese sulphate</i> Result:negative (read-across results <i>in vivo</i> and <i>in vitro</i> test Manganese chloride)
Carcinogenicity:	<i>Manganese sulphate</i> Not carcinogenic
Reproductive Toxicity:	<i>Manganese sulphate</i> Not classified
Specific Target Organ Toxicity (STOT) - Single Exposure:	<i>Manganese sulphate</i> Not classified
Specific Target Organ Toxicity (STOT) - Repeated Exposure:	<i>Manganese sulphate</i> STOT RE 2 May cause damage to the brain through prolonged or repeated exposure by inhalation
Aspiration Hazard:	<i>Manganese sulphate</i> STOT RE 2 May cause damage to the brain through prolonged or repeated exposure by inhalation

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Likely Routes Of Exposure: No data available for the mixture. Possible symptoms that may occur:

Inhalation: May cause irritation to the respiratory tract. Cough, shortness of breath

Skin: May cause irritation to the skin. Redness, itching, pain

Eye: Causes serious eye damage. Pain, redness

Ingestion: The product dissolved in water or in presence of moisture, can cause an acid reaction and if swallowed can cause irritation and burns of the mouth, throat and digestive tract. Vomiting, abdominal pain, gastrointestinal disorders

12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Manganese sulphate

Aquatic compartment	Results	Substance	Reference
Short-term toxicity: <i>Oncorhynchus mykiss</i> Fresh water	LC50 (96 h): 14.5 mg/L Mn	Test material: Manganese sulphate monohydrate	Davies PH (1980)
Long-term toxicity: <i>Oncorhynchus mykiss</i> Fresh water	NOEC (4 mo): 0.6 mg/L Mn	Test material (EC name): Manganese sulphate	Davies P & Brinkman S (1994)
Short-term toxicity: <i>Daphnia magna</i> Fresh water	LC50 (48 h): 9.8 mg/L dissolved (meas. (arithm. mean)) based on: as Mn ²⁺	Test material (EC name): Manganese chloride	Biesinger KE & Christensen GM (1972)
Long-term toxicity: <i>Daphnia magna</i> Salt water	LC50 (3 wk): 5700 µg/L dissolved (meas. (arithm. mean)) based on: mortality	Test material (EC name): Manganese chloride	Biesinger KE & Christensen GM (1972)
Algae: <i>Desmodesmus subspicatus</i> (algae, growth inhibition test) Fresh water	EC50 (72 h): 61 mg/L test mat. (nominal) based on: growth rate	Test material: Manganese sulphate monohydrate	Vryenhoef H (2010)

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Persistence and Degradability:	No data available for the mixture
Bioaccumulative Potential:	The mixture does not contain any bioaccumulative component
Mobility in Soil:	In general, the mobility in the soil of the microelements in the mixture is influenced by several factors such as pH, CO ₂ concentration, redox conditions, availability of organic and inorganic compounds <i>Manganese sulphate</i> No data available
Other Adverse Effects:	Not available

13. DISPOSAL CONSIDERATIONS

Product Disposal:	Recover the product, if possible, or send to the incineration and disposal system in accordance with local/national regulations. Avoid discharging in sewer and water courses.
Container Disposal:	Dispose in a safe manner in accordance with local/national regulations.

14. TRANSPORT INFORMATION

Classification:	Not classified as Dangerous Goods for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition. (ADG7) when being transported in IBCs or other receptacles <500 L (kg), (Special Provision AU01).
SEA and AIR	
UN Number:	3077
Proper Shipping Name or Technical Name:	SOLID SUBSTANCE – HARMFUL FOR THE ENVIRONMENT, N.O.S.(manganese sulphate)
Transport Hazard Class:	9
Packing Group:	III
Environmental Hazards for Transport Purposes:	ADR-environmental pollutant – Yes IMDG Marine pollutant - No
Special Precautions for User:	Not applicable
HAZCHEM Code:	2X

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15. REGULATORY INFORMATION

SUSMP:	S6
APVMA:	Exempt from registration
State Departments of Agriculture / Primary Industries:	Registration not required
Australian Inventory of Chemical Substances (AICS):	All components listed

16. OTHER INFORMATION

Edition:	Initial edition
Revision Due:	December 2021
Reason for Revision:	Initial version
Preparation Information:	Prepared by Campbells Fertilisers Australasia
Data Sources:	Supplier SDS

Glossary:

ACGIH	American Conference of Government Industrial Hygienists
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
APVMA	Australian Pesticides and Veterinary Medicines Authority
CAS	Chemical Abstract Services number, used to uniquely identify chemical compounds
DNEL	Derived No Effect Level
IMDG	International Maritime Code for Dangerous Goods
PNEC	Predicted No Effect Concentration
PPE	Personal protective equipment
STEL	Short Term Exposure Limit
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
TLV	Threshold Limiting Value
TWATLV	Threshold Limit Value for the Time Weighted Average 8 hour day (ACGIH Standard)

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 Campbell's Fertilisers, it is the user's responsibility to determine conditions of safe use of the product.

END OF SDS