

SAFETY DATA SHEET

Valagro Brexil Fe

Date of Issue: August 2016

1. IDENTIFICATION

| | |
|---|--|
| Product Identifier: | Valagro Brexil Fe |
| 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) |

2. HAZARD(S) IDENTIFICATION



Pictogram: Exclamation Mark

GHS Hazard Class and Category:

Acute Toxicity Category 4: "Warning"

Hazard statement: H302: Harmful if swallowed.

Eye Irritation Category 2: "Warning"

Hazard statement: H319: Causes serious eye irritation.

Skin Irritation Category 2: "Warning"

Hazard statement: H315: Causes skin irritation.

Precautionary Statements:

Prevention

P264 Wash hands thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P280 Wear protective gloves. Wear eye protection/face protection

Response

P301 + P312 IF SWALLOWED: Call a POISON CENTRE 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

P321 Specific treatment (see supplemental first aid instructions on this label)

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P330 Rinse mouth

P332 + P313 If skin irritation occurs: Get medical advice/attention

P337 + P313 If eye irritation persists: Get medical advice/attention

P362: Take off contaminated clothing and wash before reuse

Storage

No additional information

Disposal

P501 Dispose of contents/container in accordance with local/state/national/international 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

SUSMP Not scheduled
Classification:

3. COMPOSITION AND INFORMATION ON INGREDIENTS

| Component: | CAS Number: | Proportion (%w/w): |
|-------------------|-------------|--------------------|
| Iron (II) Sulfate | 7720-78-7 | 30-40 |

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 all contaminated clothing immediately. Areas of the body that have or are suspected of having come into contact with the product must be rinsed immediately with plenty of running water and soap. Wash the body thoroughly in a shower or bath. Dispose of contaminated clothing safely.

Eye Contact: Rinse with plenty of water with the eyelids held open for a sufficient length of time, then consult an ophthalmologist immediately. Protect uninjured eye.

Ingestion: Do not under any circumstances induce vomiting. Rinse mouth with water and if the person is conscious give water to drink. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

First Aid Facilities: Ensure washing facilities, including an eyewash, are available and maintained.

Advice: Persons providing first aid must use personal protection equipment (latex gloves and safety glasses).

Symptoms caused by Exposure:

No data available for the mixture. Symptoms related to iron sulfate:

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Vomiting, diarrhoea, mild lethargy, upper abdominal pain, pallor, and hyperglycaemia with more severe clinical findings including cyanosis, stupor, acidosis, haematemesis, shock, and coma (Aisen, 1990).

Corrosion of the gastric mucosa occurs in humans following iron overdose (Hoppe et al., 1955).

Medical Attention and Special Treatment:

If exposed, concerned or if symptoms persist, get medical attention/advice immediately. If medical advice is needed, have product container, label or safety data sheet at hand.

Treatment: no data available

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Equipment: Water, carbon dioxide (CO₂)

Specific Hazards arising from the Chemical: Do not inhale explosion and combustion gases. Burning produces smoke containing carbon oxides, nitrogen oxides, sulfur oxides, and ammonia.

Special Protective Equipment and Precautions for Fire Fighters: Use suitable breathing apparatus. 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.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: No action shall be taken involving any personal risk or without suitable training.

For non-emergency personnel:

- Wear protective clothes giving total skin protection, latex gloves and safety glasses
- Keep people not involved in the emergency intervention away from the affected area.
- Ensure adequate ventilation
- Alert the internal emergency team

For emergency responders:

- Wear protective clothes giving total skin protection, latex gloves and safety glasses
- See protective measures in section 8
- Ensure adequate ventilation, move people into a safe place

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Environmental Precautions: Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Dilute with water and retain contaminated wash water and dispose in authorized facilities or pick up in clean plastic labeled containers and reuse as fertilizer. In case of gas escape or entry into waterways, soil or drains, inform the responsible authorities. Suitable material for taking up: absorbing material, organic, sand.

Methods and Materials for Containment and Cleaning Up: Collect the product for example using a shovel and broom. Avoid raising dust. Wash with plenty of water and absorb with organic material or sand. Collect the product absorbed for example using a shovel and broom.

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 transferring product, ensure there are no incompatible material residuals in the containers. Contaminated clothing should be changed before entering eating areas. Do not drink or eat in work areas. See section 8 for recommended protective equipment.

Conditions for Safe Storage, including any Incompatibilities: Keep in original containers in a cool well-ventilated area, away from sources of heat. Keep away from food, drink or feed. Incompatible materials: bases, oxidizing and reducing agents. Adequately ventilate premises.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards: No data available for the mixture.

Iron (II) sulfate:
 Consumer:
 DNEL (oral) mg/kg/day = 0.8 Assumes 24 h/d exposure
 DNEL (dermal) mg/kg/day = 0.8 Assumes 24 h/d exposure
 DNEL (inhalation) mg/m³ = 1.4 Assumes 24 h/d exposure

Worker:
 DNEL (oral) mg/kg/day = N.A. Assumes 8 h/d exposure
 DNEL (dermal) mg/kg/day = 1.6 Assumes 8 h/d exposure
 DNEL (inhalation) mg/m³ = 5.5 Assumes 8 h/d exposure

PNEC Exposure Limit Values

| | Value |
|--|-------|
| PNEC _{sediment} (g Fe/kg dwt) | 49.5 |
| PNEC soil (g/kg dwt) | 55 |
| PNEC _{stp} (mg Fe/L) | 500 |

Biological Monitoring: Not available.

Control Banding: Not available.

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| Engineering Controls: | Not specified. |
| Individual Protection Measures e.g. Personal Protective Equipment (PPE): | <p>Please observe the usual precautionary measures for handling of chemicals</p> <p><i>Eye and Face Protection:</i> Use close fitting safety goggles according to the standard EN166. Do not use contact lenses.</p> <p><i>Skin Protection:</i> Use protective gloves that provide comprehensive protection e.g. PVC, neoprene or rubber according to EN374. Use clothing that provides comprehensive protection e.g. cotton, rubber, PVC or viton.</p> <p><i>Respiratory Protection:</i> Use dust mask with P2 (FFP2) filters according to the EN143. Respect the occupational exposure limits.</p> <p><i>Thermal Hazards:</i> None known.</p> |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|------------------------|
| Appearance: | Brown microgranules |
| Odour: | Not available |
| Vapour Pressure (mm Hg): | Not available |
| Apparent Density: | 0.65 g/cm ³ |
| Boiling Point: | Not available |
| Freezing/Melting Point: | Not available |
| Solubility (aqueous solution): | 400 g/L at 25°C |
| Specific Gravity: | Not available |
| pH: | 3.3 |
| Flash Point: | Not available |
| Flammability (explosive) Limits: | Not available |
| Auto-Ignition Temperature: | Not available |
| Octanol/Water Partition Coefficient: | Not available |

10. STABILITY AND REACTIVITY

| | |
|--|--|
| Chemical Stability: | Stable under normal conditions of storage and handling |
| Possibility of Hazardous Reactions: | The product can release gaseous ammonia if in contact with alkaline substances such as lime. |
| Conditions to Avoid: | Avoid high temperatures. |
| Incompatible Materials: | Bases |

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Hazardous Decomposition Products: The product can release gaseous ammonia if in contact with alkaline substances such as lime.

11. TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity of Mixture:

Oral Ingestion: LD50 (rat) >2000 mg/kg

Toxicological Information of Main Substances found in Mixture: Iron sulfate

Acute Toxicity: NOAEC in humans for acute respiratory effects would probably be higher than 0.02 mg Fe/m³ of respirable aerosols for a 2-hour exposure period

Skin Corrosion/Irritation: Ferrous sulfate heptahydrate, 500 mg of solid applied to skin under semi-occlusion; Rabbit; OECD TG 404 and GLP; Irritant; 1; Clouzeau, 1994

Serious Eye Damage/Irritation: Solutions of industrial grade ferric chloride and ferric sulfate have a pH of <1. They would therefore be expected to be corrosive, according to EU criteria (Directive 93/21/EEC)

Respiratory or Skin Sensitisation: Not sensitizing to the respiratory system and skin

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: Not classified. NOAELs for reproductive and developmental effects ≥1000 mg/kg body weight/day

Specific Target Organ Toxicity (STOT) - Single Exposure: Based on available data, the classification criteria are not met

Specific Target Organ Toxicity (STOT) - Repeated Exposure: Based on available data, the classification criteria are not met

Aspiration Hazard: Based on available data, the classification criteria are not met

Likely Routes Of Exposure

Inhalation: No data available

Skin: Causes skin irritation.

Eye: Causes serious eye irritation.

Ingestion (of iron sulfate): Vomiting, diarrhea, mild lethargy, upper abdominal pain, pallor, and hyperglycaemia with more severe clinical findings including cyanosis, stupor, acidosis, haematemesis, shock, and coma (Aisen, 1990).

12. ECOLOGICAL INFORMATION

Ecotoxicity: Adopt good working practices so that the product is not released to the environment. Based on the available data, the product is non-toxic for the environment. The release of large amounts may cause a decreasing of the pH value and can have negative effects on aquatic environments.

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| Persistence and Degradability: | No data available for the mixture. The mixture contains ammonium lignosulfate that is a natural biodegradable product. Not applicable for inorganic salts such as iron sulfate. |
| Bioaccumulative Potential: | This product does not contain any bioaccumulative substances. |
| Mobility in Soil: | The product is soluble and mobile in both terrestrial and aquatic compartments |

13. DISPOSAL CONSIDERATIONS

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|----------------------------|---|
| Product Disposal: | Recover if possible. In doing so, comply with state, federal and local regulations. |
| Container Disposal: | Dispose of according to local regulations. |

14. TRANSPORT INFORMATION

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| Classification: | Based on available information, 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, 7 th Edition. |
| UN Number: | Not applicable |
| Proper Shipping Name or Technical Name: | Not applicable |
| Transport Hazard Class: | Not applicable |
| Packing Group: | Not applicable |
| Environmental Hazards for Transport Purposes: | Not applicable |
| Special Precautions for User: | Not applicable |
| HAZCHEM Code: | Not applicable |

15. REGULATORY INFORMATION

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

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16. OTHER INFORMATION

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

Glossary:

APVMA Australian Pesticides and Veterinary Medicines Authority
CAS Chemical Abstract Services number, used to uniquely identify chemical compounds
PPE Personal protective equipment
SUSMP Standard for the Uniform Scheduling of Medicines and Poisons

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