

Datee: October 29, 2020

Product: Brexil Mn Code: 1284

Print Date: October 29, 2020

version number: 1.0

# SAFETY DATA SHEET BREXIL Mn

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture
Trade name : Brexil Mn
Product code : 11284

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Fertilizer

### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Distributed and guaranteed by:

Campbells Fertilisers Australasia

18 Raymond Road, Laverton North, Victoria, 3026

Phone: (03) 9931 2211 Fax: (03) 9931 2201 www.campbellsfert.com.au

Competent person responsible for the safety data sheet:

regulatory@valagro.com

# 1.4. Emergency telephone number

Poison Information Centre - Telephone: 131126 (Australia wide - 24HRS)

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.

Classification according to the Hazardous Substances (Classification) Notice 2017 of the HSNO Act, 1996:

# **HSNO Classification:**

8.3A - Substances that are corrosive to ocular tissue

 $6.9\mbox{B}$  - Substances that are harmful to human target organs or systems

9.1B - Substances that are ecotoxic in the aquatic environment

### Hazard statement codes:

H318 - Causes serious eye damage

H373 - May cause damage to organs (brain) through prolonged or repeated exposure (Inhalation)

H411 - Toxic to aquatic life with long lasting effects

# Precautionary statement codes - Prevention:

P102 - Keep out of reach of children

P103 - Read label before use

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P273 - Avoid release to the environment

P280 - Wear eye protection, face protection

#### Precautionary statement codes - Response:

P101 - If medical advice is needed, have product container or label at hand



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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

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

## Precautionary statement codes - Disposal:

P501 - Dispose of contents/container to comply with applicable local, national and international regulation

#### **Label elements**

Hazard pictograms (CLP)







Signal word (CLP)

### : Danger

#### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

# **SECTION 3: Composition/information on ingredients**

#### **Substances** 3.1.

Not applicable

#### 3.2. **Mixtures**

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Manganese(II) sulfate	(CAS No) 7785-87-7	25 - 30	HSNO Approval Code HSR003945 Restrictions / Exclusions: None

Other ingredients not subject to the provisions of the Hazardous Substances (identification) Regulations 2001, make up the product concentration to 100%

Full text of H-statements: see section 16

### **SECTION 4: First aid measures**

#### **Description of first aid measures**

First-aid measures general

First-aid measures after skin contact

: Self-protection of the first aider. First-aid measures after inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. In case of breathing difficulties administer oxygen. In case of irregular breathing or

respiratory arrest provide artificial respiration. Seek medical advice.

Remove contaminated clothing immediately and dispose of safely. Wash skin thoroughly with mild soap and water. If skin irritation occurs: Get medical

advice/attention. First-aid measures after eye contact

: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Protect uninjured eye.

First-aid measures after ingestion If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Immediately call a POISON CENTER (Ph. Australia 131 126; New Zealand 0800 764 766) or doctor/ physician.

# Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation

: Inhalation may cause irritation, cough, shortness of breath.

Symptoms/injuries after skin contact

: May cause moderate irritation. Redness. Itching. Pain.



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Symptoms/injuries after eye contact : Pain. Redness.

Symptoms/injuries after ingestion Severe irritation or burns to the mouth, throat, oesophagus, and stomach. Vomiting.

Abdominal pain. Digestive disorder.

#### Indication of any immediate medical attention and special treatment needed

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### **SECTION 5: Firefighting measures**

#### **Extinguishing media**

: Water spray, dry chemical, foam, carbon dioxide. Suitable extinguishing media

Unsuitable extinguishing media : None known.

#### Special hazards arising from the substance or mixture

Fire hazard : Do not inhale explosion and combustion gases.

Hazardous decomposition products in case On combustion forms: carbon oxides (CO and CO2). Nitrogen oxides. Sulfur oxides. of fire

Manganese Oxide.

#### 53 Advice for firefighters

Precautionary measures fire : Evacuate the personnel away from the fumes.

Firefighting instructions Cool down the containers exposed to heat with a water spray. Move undamaged

containers from immediate hazard area if it can be done safely.

Protective equipment for firefighters Extra personal protection: complete protective clothing including self-contained

breathing apparatus.

Other information : Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code

# **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures 6.1.

#### 6.1.1. For non-emergency personnel

Protective equipment : Do not attempt to take action without suitable protective equipment. Wear suitable

protective clothing, gloves and eye/face protection.

**Emergency procedures** Alert emergency personnel. Eliminate all ignition sources if safe to do so. Provide

adequate ventilation.

Dust production: dust mask with filter type P2. Measures in case of dust release

#### For emergency responders

Protective equipment Wear suitable protective clothing, gloves and eye/face protection. Avoid breathing

dust/fume/gas/mist/vapours/spray. Dust production: dust mask with filter type P2.

**Emergency procedures** Evacuate unnecessary personnel. Avoid generation of dust. Dust may form explosive

mixture in air. Eliminate all ignition sources if safe to do so.

#### 6.2. **Environmental precautions**

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

#### Methods and material for containment and cleaning up 6.3.

For containment Stop leak if safe to do so.

Ventilate affected area. Wear personal protection equipment. Minimize generation of Methods for cleaning up

dust. Wash with plenty of soap and water. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Consult the appropriate

authorities about waste disposal.

Other information : Do not allow uncontrolled discharge of product into the environment.

# Reference to other sections

For disposal of residues refer to section 13: Disposal considerations. For further information refer to section 8: "Exposure controls/personal protection".

### **SECTION 7: Handling and storage**

### **Precautions for safe handling**

Precautions for safe handling

Avoid contact with skin and eyes. Keep away from sources of ignition - No smoking. Take any precaution to avoid mixing with Incompatible materials. Minimize generation of dust. Open and handle container with care. Avoid breathing dust, mist or spray.



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Hygiene measures

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: Do not eat, drink or smoke when using this product. Wash hands thoroughly after

handling. Contaminated work clothing should not be allowed out of the workplace.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep in original containers. Store tightly closed in a dry, cool and well-ventilated place.

Keep out of direct sunlight. Use care during processing to minimize generation of dust.

Explosive dust-air mixtures may form.

Incompatible products : Alkali. Oxidizing agent. reducing agents.

Heat and ignition sources : Keep away from open flames, hot surfaces and sources of ignition.

Prohibitions on mixed storage : Keep away from food, drink and animal feeding stuffs.

# 7.3. Specific end use(s)

No additional information available

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### **New Zealand Workplace Exposure Standard:**

No value assigned for any of the ingredients by the New Zealand Department of Labour (Health & Safety).

Manganese(II) sulfate (7785-87-7)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.00414 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.2 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	0.043 mg/m³
Long-term - systemic effects, dermal	0.0021 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.0128 mg/l
PNEC aqua (marine water)	0.0004 mg/l
PNEC aqua (intermittent, freshwater)	0.03 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.0114 mg/kg dwt
PNEC sediment (marine water)	0.00114 mg/kg dwt
PNEC (Soil)	
PNEC soil	25.1 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0.56 mg/l

# 8.2. Exposure controls

## Appropriate engineering controls:

Provide adequate ventilation.

### Personal protective equipment:

Safety glasses. Gloves. Protective clothing. Dust production: dust mask with filter type P2.

#### Materials for protective clothing:

Rubbers. PVC (Polyvinyl chloride). Natural fibres (e.g. cotton)

#### Hand protection:

Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Break through time: ≥ 480 min. Thickness of glove material: 0.7 mm. Protective gloves made of rubber or PVC

#### Eye protection:

Wear eye glasses with side protection according to EN 166



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## Skin and body protection:

Chemical resistant protective apron/clothing (tested to EN 14605 or equivalent)

# Respiratory protection:

Wear a respirator conforming to EN140 with Type A/P2 filter or better. particle filter device (DIN EN 143)









#### **Environmental exposure controls:**

Do not allow into drains or water courses. Do not allow to enter into soil/subsoil.

# **SECTION 9: Physical and chemical properties**

Information on basic physical and chemical properties

: Solid Physical state Colour : brown. Odour : coffee.

Odour threshold : No data available

рΗ : No data available

pH solution : 3.3 1% (t = 20°C) Relative evaporation rate (butylacetate=1) : No data available

Melting point : Not applicable Freezing point : Not applicable

Boiling point : not applicable, solid

: No data available Flash point

Auto-ignition temperature No data available

Decomposition temperature : No data available

Flammability (solid, gas) Not applicable

Not flammable

Vapour pressure : not applicable, solid

Vapour pressure at 50 °C : not applicable, solid Relative vapour density at 20 °C : not applicable, solid : No data available

0.65 kg/l Density

Relative density

Water: 400 g/l at 20°C Solubility

Log Pow : No data available

Viscosity, kinematic : No data available



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Viscosity, dynamic : No data available

Explosive properties : not applicable. Not expected to be explosive as none of the components is classified as

explosive.

Oxidising properties : Not oxidising. None of the components are classified for oxidizing properties.

Explosive limits : No data available

#### 9.2. Other information

No additional information available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Stable under normal conditions of use.

# 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

None under normal conditions. No polymerization. May react with alkalis such as lime to generate ammonia vapours.

### 10.4. Conditions to avoid

Overheating. Avoid generation of dust. Accumulation of airborne dusts may present an explosion hazard in the presence of an ignition source.

# 10.5. Incompatible materials

Acids. alkalis. Oxidizing agent.

# 10.6. Hazardous decomposition products

When exposed to heat, may decompose liberating hazardous gases. Nitrogen oxides (NOx). Carbon dioxide (CO2). Manganese Oxide. May react with alkalis such as lime to generate ammonia vapours.

# SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Manganese(II) sulfate (7785-87-7)	
LD50 oral rat	2150 mg/kg Singh PP and Junnarkar AY (1991)
LC50 inhalation rat (mg/l)	> 4.98 mg/l Griffiths DR (2010)

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs (brain) through prolonged or repeated exposure

(Inhalation).

Aspiration hazard : Not classified



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# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Manganese(II) sulfate (7785-87-7)	
LC50 fish 1	14.5 mg/l (96h - Oncorhynchus mykiss - Davies PH (1980))
EC50 Daphnia 1	9.8 mg/l (48h - Daphnia magna - Biesinger KE & Christensen GM (1994))
EC50 72h algae (1)	61 mg/l (72h - Desmodesmus subspicatus - Growth Inhibition Test - Vryenhoef H (2010))
NOEC chronic fish	0.6 mg/l (4 mo Oncorhynchus mykiss - Davies P & Brinkman S (1994))
NOEC chronic crustacea	5700 ng/l (3 week - Daphnia magna - Biesinger KE & Christensen GM (1994))

# 12.2. Persistence and degradability

Brexil Mn	
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.

# 12.3. Bioaccumulative potential

Brexil Mn	
Bioaccumulative potential	Product does not contain any bioaccumulative substance.

# 12.4. Mobility in soil

# No additional information available

### 12.5. Results of PBT and vPvB assessment

Brexil Mn	
This substance/mixture does not meet t	he PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet t	he vPvB criteria of REACH regulation, annex XIII
Results of PBT assessment	The components in this formulation do not meet the criteria for classification as PBT or vPvB.

# 12.6. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

Waste treatment methods

Reuse or recycle following decontamination. External recovery and recycling of waste should comply with applicable local and/or national regulations.

# **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / AND / NZS 5433:2012 Transport of Dangerous Goods on Land

ADR / RI	ID IMDG	IATA	ADN	NZS5433:2012
14.1.	UN number			
3077	3077	3077	3077	3077



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ADR / RID	IMDG	IATA	ADN	NZS5433:2012
14.2. UN proper shi	pping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	Environmentally hazardous substance, solid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Transport document de	scription			
UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, (E)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s., 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III
14.3. Transport haz	ard class(es)			
9	9	9	9	9
	***	***************************************		
14.4. Packing group				
11.5.5.5.	III	III	III	
14.5. Environmenta				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
		upplementary information a		

#### 14.6. Special precautions for user

# - Overland transport

Classification code (ADR) : M7

Special provisions (ADR) : 274, 335, 601, 375

Limited quantities (ADR) : 5kg
Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR) : PP12, B3

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container : T1, BK1, BK2

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

: TP33

Tank code (ADR) : SGAV, LGBV

Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages : V13

(ADR)



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Special provisions for carriage - Bulk (ADR) : VC1, VC2 Special provisions for carriage - Loading,

unloading and handling (ADR)

Hazard identification number (Kemler No.)

Orange plates

90 90 3077

: CV13

2Z

Tunnel restriction code (ADR)

E EAC code 2Z Hazchem Code

# - Transport by sea

Special provisions (IMDG) : 274, 335, 966, 967, 969 Limited quantities (IMDG) 5 kg

Excepted quantities (IMDG) E1 Packing instructions (IMDG) P002, LP02 Special packing provisions (IMDG)
IBC packing instructions (IMDG) PP12 IBC08

IBC special provisions (IMDG) **B3** Tank instructions (IMDG) T1, BK1, BK2, BK3

Tank special provisions (IMDG) TP33 EmS-No. (Fire) F-A EmS-No. (Spillage) S-F Stowage category (IMDG) Α Stowage and handling (IMDG) **SW23** 

#### - Air transport

PCA Excepted quantities (IATA) E1 PCA Limited quantities (IATA) Y956 PCA limited quantity max net quantity 30kgG

(IATA)

PCA packing instructions (IATA) 956 PCA max net quantity (IATA) 400kg CAO packing instructions (IATA) 956 400kg CAO max net quantity (IATA)

Special provisions (IÁTA) A97, A158, A179, A197

ERG code (IATA) 9L

# - Inland waterway transport

Classification code (ADN) : M7

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 kg Excepted quantities (ADN) : F1 T\* B\*\* Carriage permitted (ADN) Equipment required (ADN) PP, A Number of blue cones/lights (ADN) 0

## - Rail transport

Classification code (RID) : M7

Special provisions (RID) 274, 335, 375, 601

Limited quantities (RID) 5kg Excepted quantities (RID) : E1

Packing instructions (RID) P002, IBC08, LP02, R001

Special packing provisions (RID) PP12, B3 MP10 Mixed packing provisions (RID) Portable tank and bulk container T1, BK1, BK2

instructions (RID)

Portable tank and bulk container special : TP33

provisions (RID)

: SGAV, LGBV Tank codes for RID tanks (RID)

Transport category (RID)



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Special provisions for carriage – Packages : W13

(RID)

Special provisions for carriage – Bulk (RID) : VC1, VC2 Special provisions for carriage - Loading, : CW13, CW31

unloading and handling (RID)

Colis express (express parcels) (RID) : CE11 Hazard identification number (RID) : 90

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

# **SECTION 15: Regulatory information**

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

## 15.1.2. National regulations

#### **New Zealand**

Classification: : Classified as hazardous according to HSNO Act 1996; Hazardous Substances

(Classification) Notice 2017.

National Chemical Inventories (NZIoC) : All components are listed on the New Zealand Inventory of Chemicals HSNO Approval Number (Group Standard) : HSR002571. Fertiliser (Subsidiary Hazard) Group Standard 2006

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out

# **SECTION 16: Other information**

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Eye Dam. 1	H318	Calculation method	- 7000000000000000000000000000000000000
STOT RE 2	H373	Calculation method	300000000000000000000000000000000000000
Aquatic Chronic 2	H411	Calculation method	3//////////////////////////////////////

#### Abbreviations and acronyms:

SDS	Safety Data Sheet
CAS	Chemical Abstracts Service
GHS	Globally Harmonised System
CSR	Chemical Safety Report
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration



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OECD	Organisation for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
	PVC (Polyvinyl chloride).
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

### Other information

: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product.

#### Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H318	Causes serious eye damage
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects