

Revision date: May 08, 2020 version number: 1.0

Product: Brexil Mn Code: 11284

Print Date: May 8, 2020

SAFETY DATA SHEET BREXIL Mn

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

1.1. Product identifier

Product form : Mixtures
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

AGRITRADE
411 Blenheim Rd
Sockburn
Christchurch 8140
Ph 03 341 4587
Fax 03 341 4584
Free Phone 0800 333 855
agritrade@nzagritrade.co.nz

1.4. Emergency telephone number

Emergency number : 24 Hour Emergency Contact: 0800 CHEMCALL (0800 243622)

: 111 Police, Ambulance and Fire Brigade (available in New Zealand only)

NZ POISON CENTRE CONTACT 0800 764 766 (National Poisons Information Centre)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

6.9B - 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



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Precautionary statement codes - Response:

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

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

: Danger

2.2. Label elements

Hazard pictograms (CLP)







Signal word (CLP)

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

3.1. Substances

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

4.1. Description of first aid measures

First-aid measures general

First-aid measures after inhalation

: Self-protection of the first aider.

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. First-aid measures after skin contact : Remove contaminated clothing immediately and dispose of

: 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.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation

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



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Symptoms/injuries after skin contact : May cause moderate irritation. Redness. Itching. Pain.

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.

4.3. 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

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

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.

Advice for firefighters 5.3.

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.

27 Hazchem Code

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

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

protective clothing, gloves and eye/face protection.

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

adequate ventilation.

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

6.1.2. 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

Stop leak if safe to do so. For containment

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".



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SECTION 7: Handling and storage

7.1. 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.

Hygiene measures : 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/m ³	
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	7/////////
PNEC aqua (intermittent, freshwater)	0.03 mg/l	AMMATA 1.1
PNEC (Sediment)		
PNEC sediment (freshwater)	0.0114 mg/kg dwt	2//////////////////////////////////////
PNEC sediment (marine water)	0.00114 mg/kg dwt	
PNEC (Soil)		
PNEC soil	25.1 mg/kg dwt	-WWI11/1/
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)



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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

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

9.1. Information on basic physical and chemical properties

Physical state : Solid

Colour : brown.

Odour : coffee.

Odour threshold : No data available

pH : No data available

pH solution : $3.3 \text{ 1}\% \text{ (t} = 20^{\circ}\text{C)}$

Relative evaporation rate (butylacetate=1) : No data available

Melting point : Not applicable

Freezing point : Not applicable

Boiling point : not applicable, solid

Flash point : No data available

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

Relative density : No data available

Density : 0.65 kg/l



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Solubility : Water: 400 g/l at 20°C

Log Pow : No data available
Viscosity, kinematic : No data available

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

explosive.

: No data available

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

Viscosity, dynamic

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



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STOT-single exposure : Not classified

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

(Inhalation).

Aspiration hazard : Not classified

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



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SECTION 14: Transport information

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

ADR / RID	IMDG	IATA	ADN	NZS5433:2012
4.1. UN number				
077	3077	3077	3077	3077
4.2. UN proper sh	ipping 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.
ransport document de	escription			
JN 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
4.3. Transport haz	zard class(es)			11110
	9	9	9	9

4.4. Packing grou		T	1	
1		III	III	III \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
4.5. Environmenta				
angerous for the nvironment: Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes

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



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Tank code (ADR) : SGAV, LGBV

Vehicle for tank carriage ΑT Transport category (ADR) 3 V13

Special provisions for carriage - Packages

Special provisions for carriage - Bulk (ADR) VC1, VC2 Special provisions for carriage - Loading, CV13

unloading and handling (ADR)

Hazard identification number (Kemler No.)

Orange plates

90 90 3077

Tunnel restriction code (ADR)

: E EAC code 2Z Hazchem Code 2Z

- 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) PP12 IBC packing instructions (IMDG) IBC08

IBC special provisions (IMDG) **B**3 T1, BK1, BK2, BK3 Tank instructions (IMDG)

Tank special provisions (IMDG) **TP33** EmS-No. (Fire) F-A S-F EmS-No. (Spillage) 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 CAO max net quantity (IATA) 400kg

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

M7

ERG code (IATA) 9L

- Inland waterway transport

Classification code (ADN)

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

: 5 kg Limited quantities (ADN) Excepted quantities (ADN) E1 T* B** Carriage permitted (ADN) PP, A Equipment required (ADN) Number of blue cones/lights (ADN) 0

- Rail transport

Classification code (RID) : M7

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

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

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

Special packing provisions (RID) PP12, B3 Mixed packing provisions (RID) MP10



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Portable tank and bulk container : T1, BK1, BK2

instructions (RID)

Portable tank and bulk container special : TP33

provisions (RID)

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

Transport category (RID) : 3 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]:

Gradomication and procedure		accompanier for immunice according to reciganation	. (=0) .=.=,=000 [0=.].
Eye Dam. 1	H318	Calculation method	///////////////////////////////////////
STOT RE 2	H373	Calculation method	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Aquatic Chronic 2	H411	Calculation method	- /////////////////////////////////////

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



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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
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