

VALAGRO SDS according to HSNO Regulations – NZ EPA

Revision date: 03/092021      version number: 1.1

Product: MC CREAM

Code: 2464

Print Date: September 3, 2021

## SAFETY DATA SHEET

### MC CREAM

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

##### 1.1. Product identifier

Product form : Mixture  
Trade name : MC CREAM  
Product code : 2464

##### 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  
1 Robin Mann Place  
Christchurch Airport  
Christchurch 8053  
New Zealand  
Ph 03 341 4587  
Fax 03 341 4584  
Free Phone 0800 333 855  
[agritrade@nzagritrade.co.nz](mailto:agritrade@nzagritrade.co.nz)

##### 1.4. Emergency telephone number

Emergency number : AGRITRADE- Tel. 0800 333 855  
: 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

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.  
Not Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.

###### HSNO Classification:

9.1C - Substances that are harmful in the aquatic environment (Chronic)

###### Hazard statement codes

H412 - Harmful to aquatic life with long lasting effects

###### Precautionary statement codes – Prevention:

P103 - Read label before use  
P273 - Avoid release to the environment

###### Precautionary statement codes – Disposal:

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

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## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard Pictogram (CLP) : None  
Signal word (CLP) : None

## 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. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Approval Status (NZIoC)
Manganese(II) sulfate	(CAS No) 7785-87-7 (EC no) 231-753-5 (EC index no) 026-003-00-7 (REACH-no) 01-2119474684-27-xxxx	3 - 5	HSNO Approval Code HSR003945 Restrictions / Exclusions: None
Zinc sulphate	(CAS No) 7733-02-0 (EC no) 231-793-3 (EC index no) 030-006-00-9 (REACH-no) 01-2119474684-27-xxxx	1 - 1.9	HSNO Approval Code HSR003279 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 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.

First-aid measures after skin contact : 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). Give water to drink if victim completely conscious/alert. Do not induce vomiting. Obtain medical attention or call a POISON CENTER (Ph: Australia 131 126; New Zealand 0800 764 766).

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

Symptoms/injuries after inhalation : Unlikely route of exposure. Inhalation may cause irritation, cough, shortness of breath.

Symptoms/injuries after skin contact : Repeated or prolonged skin contact may cause irritation. irritation (itching, redness, blistering).

Symptoms/injuries after eye contact : May cause moderate irritation, including burning sensation, tearing, redness or swelling.

Symptoms/injuries after ingestion : May cause gastric irritation. Vomiting.

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**4.3. Indication of any immediate medical attention and special treatment needed**

No additional information available

**SECTION 5: Firefighting measures****5.1. Extinguishing media**Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>). Water.

Unsuitable extinguishing media : combustible materials.

**5.2. Special hazards arising from the substance or mixture**

Fire hazard : Do not breathe fumes.

Hazardous decomposition products in case of fire : Sulfur oxides.

**5.3. 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.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

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

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

**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. Spilled material may present a slipping hazard.

Emergency procedures : Evacuate unnecessary personnel.

**6.2. Environmental precautions**

Avoid release to the environment.

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

For containment : Stop leak if safe to do so.

Methods for cleaning up : Ventilate affected area. Wear personal protection equipment. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed containers for disposal. Wash with plenty of soap and water. Consult the appropriate authorities about waste disposal.

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

**6.4. 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****7.1. Precautions for safe handling**

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing mist or vapour. Keep away from sources of ignition - No smoking. Do not re-use empty containers without proper cleaning or reconditioning.

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.

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### 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.
Incompatible products	: Oxidising agents. reducing agents. Acids. Bases.
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:

WES or BEI set as at 12<sup>th</sup> Edition of Workplace exposure standards (Nov 2020):  
Exposure limit Manganese (Mn) TWA 0.2 mg/m<sup>3</sup> inorganic compounds

#### 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<sup>3</sup>

##### DNEL/DMEL (General population)

Long-term - systemic effects, inhalation 0.043 mg/m<sup>3</sup>

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 56 mg/l

#### Zinc sulphate (7733-02-0)

##### DNEL/DMEL (Workers)

Long-term - systemic effects, dermal 500 mg/kg bodyweight/day

Long-term - systemic effects, inhalation 1 mg/m<sup>3</sup>

##### DNEL/DMEL (General population)

Long-term - systemic effects, oral 50 mg/kg bodyweight/day

Long-term - systemic effects, inhalation 1,3 mg/m<sup>3</sup>

Long-term - systemic effects, dermal 500 mg/kg bodyweight/day

##### PNEC (Water)

PNEC aqua (freshwater) 0,0206 mg/l

PNEC aqua (marine water) 0,0061 mg/l

##### PNEC (Sediment)

PNEC sediment (freshwater) 235,6 mg/kg dwt

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<b>Zinc sulphate (7733-02-0)</b>	
PNEC sediment (marine water)	113 mg/kg dwt
PNEC (Soil)	
PNEC soil	106,8 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0,052 mg/l

### 8.2. Exposure controls

- Appropriate engineering controls : Provide adequate ventilation.
- Personal protective equipment : Safety glasses. Gloves. Protective clothing.
- Hand protection : Chemical resistant gloves (according to European standard EN 374 or equivalent).  
Protective gloves made of nitrile
- Eye protection : Wear eye glasses with side protection according to EN 166.
- Skin and body protection : Use chemically protective clothing



- 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 : Liquid
- Colour : green.
- Odour : odourless.
- Odour threshold : No data available
- pH : No data available
- pH solution : 3.9 1% (t = 20°C)
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available
- Vapour pressure : No data available
- Relative vapour density at 20 °C : No data available
- Relative density : No data available
- Density : 1.1 kg/l @ 20 °C

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Solubility	:	No data available
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available
Particle characteristics	:	Not applicable

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No additional information available

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

None under normal conditions. No polymerization.

**10.4. Conditions to avoid**

Overheating.

**10.5. Incompatible materials**

Oxidising agents. reducing agents. Acids.

**10.6. Hazardous decomposition products**

During a fire: Sulfur oxides.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

Acute toxicity : Not classified

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

<b>Zinc sulphate (7733-02-0)</b>	
LD50 oral rat	574 - 2949 mg/kg (Litton Bionetics, 1974;Courtois et al., 1978)
LD50 dermal rat	> 2000 mg/kg Van Huygevoort (1999a)

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified - TEST OECD 405 (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified

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Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>Manganese(II) sulfate# (7785-87-7)</b>	
LC50 fish 1	14.5 mg/l (96h - Oncorhynchus mykiss - Davies PH (1980) )
EC50 Daphnia 1	9.8 mg/l (48h - Daphnia magna - Davies P & Brinkman S (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))

<b>Zinc sulphate (7733-02-0)</b>	
EC50 Daphnia 1	1.82 mg/l (pH<7 - 48h - C. Dubia - US EPA 821-R-02-012)
EC50 72h algae (1)	3.73 mg/l (pH 7-8.5 - 72h - pseudokirchneriella subcapitata - OECD 201)

### 12.2. Persistence and degradability

<b>12464</b>	
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

<b>12464</b>	
Ecology - soil	Expected to be highly mobile in soil.

### 12.5. Results of PBT and vPvB assessment

<b>12464</b>	
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 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.

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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

**14.1. UN number**

Not regulated for transport

**14.2. UN proper shipping name**

Proper Shipping Name (NZS5433)	: Not applicable
Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

**14.3. Transport hazard class(es)****NZ**

Transport hazard class(es) (NZS5433) : Not applicable

**ADR**

Transport hazard class(es) (ADR) : Not applicable

**IMDG**

Transport hazard class(es) (IMDG) : Not applicable

**IATA**

Transport hazard class(es) (IATA) : Not applicable

**ADN**

Transport hazard class(es) (ADN) : Not applicable

**RID**

Transport hazard class(es) (RID) : Not applicable

**14.4. Packing group**

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable

**14.5. Environmental hazards**

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

**14.6. Special precautions for user****- Overland transport**

No data available

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**- Transport by sea**

No data available

**- Air transport**

No data available

**- Inland waterway transport**

No data available

**- Rail transport**

No data available

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 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 o Hazardous Substances (Classification) Notice 2020, New Zealand  
 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  
 ACVM ACT 1997 : Exempt from registration under the Agricultural Compounds and Veterinary Medicines Act 1997

**15.2. Chemical safety assessment**

Issue date: September 3, 2021

For the following substances of this mixture a chemical safety assessment has been carried out: **Zinc sulphate (7733-02-0), Manganese(II) sulfate (7785-87-7)**

**SECTION 16: Other information**

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

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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 Rai
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 the mentioned precautionary measures and to ensure that this information is complete and sufficient for the use of this product.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
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
H302	Harmful if swallowed
H318	Causes serious eye damage
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

SDS EU (REACH Annex II)

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