

VALAGRO SDS

Revision date: 13/09/2021 version number: 4.1

Product: Master 20-5-10+2

Code: 1792

Print Date: September 13, 2021

SAFETY DATA SHEET

Master 20-5-10+2

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

1.1. Product identifier

Product form : Mixture
Trade name : Master 20-5-10+2
Product code : 1792

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

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

Classified as Hazardous according to the Hazardous Substances (Classification) Notice 2020, 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:

6.4A - Substances that are irritating to the eye

Hazard statement codes:

H319 - Causes serious eye irritation

Precautionary statement codes – Prevention:

P103 - Read label before use
P264 - Wash exposed areas thoroughly after handling
P280 - Wear protective eye/face protection

Precautionary statement codes – 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
P337 + P313 If eye irritation persists: Get medical advice/attention.

Precautionary statement codes – Disposal:

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

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Hazard pictograms (CLP) :



Signal word (CLP) : Warning

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier (Cas No)	%	Approval Status (NZIoC)
Ammonium nitrate	6484-52-2	30 - 40	HSNO Approval Code HSR001310 Restrictions / Exclusions: None
Boric acid	CAS:10043-35-3	>= 0.1% - < 0.25%	HSNO Approval Code HSR002995 Specific concentration limit >= 5.5%

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : 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.
- 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). Do not induce vomiting. Immediately call a POISON CENTER or doctor/ physician.
- Other information : For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

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

- Symptoms/injuries after inhalation : Decomposition products may be a hazard to health.
- Symptoms/injuries after eye contact : Irritating to eyes. symptoms may include stinging, tearing, redness, swelling and blurred vision.
- Symptoms/injuries after ingestion : May cause irritation in mouth, gullet and stomach.

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

In case of inhalation of fumes : Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water.
- Unsuitable extinguishing media : carbon dioxide (CO2), dry chemical powder, foam.

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. Nitrogen oxides. Ammonia. Amines. Metal oxides.

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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 : Immediately contact emergency personnel.

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.
- Emergency procedures : Evacuate unnecessary personnel. Eliminate all ignition sources if safe to do so.

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. Minimize generation of dust. Wash with plenty of soap and water. Absorb with non-combustible 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.

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 vapor . 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.
- 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 : Store tightly closed in a dry, cool and well-ventilated place. Keep out of direct sunlight.
- Incompatible materials : Acids. alkali. Reducing agents. Avoid all organic materials.
- 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 this specific material by the New Zealand Department of Labour (Health & Safety).

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Ammonium nitrate (6484-52-2) (EU parameters)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	21.3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	37.6 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	12.8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	11.1 mg/m ³
Long-term - systemic effects, dermal	12.8 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.45 mg/l
PNEC aqua (marine water)	0.045 mg/l
PNEC aqua (intermittent, freshwater)	4.5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	18 mg/l

Boric acid (H3BO3) (10043-35-3)		
Belgium	Limit value (mg/m ³)	2 mg/m ³
Belgium	Short time value (mg/m ³)	6 mg/m ³
Bulgaria	OEL TWA (mg/m ³)	5 mg/m ³
Finland	HTP-arvo (8h) (mg/m ³)	0,5 mg/m ³ Borates (as B)
Germany	TRGS 900 Occupational exposure limit value (mg/m ³)	0,5 mg/m ³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Ireland	OEL (8 hours ref) (mg/m ³)	2 mg/m ³
Latvia	OEL TWA (mg/m ³)	10 mg/m ³
Lithuania	IPRV (mg/m ³)	10 mg/m ³
Lithuania	TPRV (mg/m ³)	2 mg/m ³
Portugal	OEL TWA (mg/m ³)	2 mg/m ³ (inhalable fraction)
Portugal	OEL STEL (mg/m ³)	6 mg/m ³ (inhalable fraction)
Slovenia	OEL TWA (mg/m ³)	0,5 mg/m ³ Boric acid and sodium borate [inhalable fraction]
Slovenia	OEL STEL (mg/m ³)	1 mg/m ³
Spain	VLA-ED (mg/m ³)	2 mg/m ³ (the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound is prohibited)
Spain	VLA-EC (mg/m ³)	6 mg/m ³
Switzerland	MAK (mg/m ³)	1,8 mg/m ³ (inhalable dust)
Switzerland	KZGW (mg/m ³)	1,8 mg/m ³ (inhalable dust)
USA - ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (inhalable particulate matter)
USA - ACGIH	ACGIH STEL (mg/m ³)	6 mg/m ³ (inhalable particulate matter)

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8.2. Exposure controls

Appropriate engineering controls	: Provide adequate ventilation.
Personal protective equipment	: Safety glasses. Gloves. Protective clothing.
Materials for protective clothing	: Rubbers. PVC (Polyvinyl chloride). Natural fibres (e.g. cotton)
Hand protection	: Chemical resistant gloves (according to European standard EN 374 or equivalent). Protective gloves made of rubber or PVC
Eye protection	: Wear eye glasses with side protection according to EN 166 or equivalent.
Skin and body protection	: Chemical resistant protective apron/clothing (tested to EN 14605 or equivalent)
Respiratory protection	: Where excessive dust may result, wear approved mask. Dust production: dust mask with filter type P2

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state	: Solid
Appearance	: Crystalline solid.
Colour	: white.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
pH solution	: 4 1%
Relative evaporation rate (butyl acetate=1)	: not applicable, solid
Melting point	: No data available
Freezing point	: No data available
Boiling point	: not applicable, solid
Flash point	: not applicable, solid
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: not applicable, solid
Relative vapour density at 20 °C	: not applicable, solid
Relative density	: No data available
Density	: 1,2 kg/l @ 20 °C
Solubility	: Water: 100 g/l @ 20°C
Log Pow	: No data available
Viscosity, kinematic	: not applicable, solid

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Viscosity, dynamic : not applicable, solid

Explosive properties : not applicable.

Oxidising properties : Not oxidising, according to UN test O.1 for oxidising solids

Explosive limits : No data available

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

No polymerization. May cause or intensify fire.

10.4. Conditions to avoid

Overheating.

10.5. Incompatible materials

Reducing agents. Acids. combustible materials. alkalis.

10.6. Hazardous decomposition products

Nitrogen oxides (NOx). Ammonia. When exposed to heat, may decompose liberating hazardous gases. Sulfur oxides. Amines. Metal oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified

Ammonium nitrate (6484-52-2)	
LD50 oral rat	2950 mg/kg (OECD 401)
LD50 dermal rat	> 5000 mg/kg bodyweight (OECD 402)
LC50 inhalation rat (mg/l)	> 88,8 mg/l
Boric acid (H3BO3) (10043-35-3)	
LD50 oral rat	> 2600 mg/kg OECD 401
LD50 dermal rabbit	> 2000 mg/kg FIFRA (40CFR 163)
LC50 inhalation rat (mg/l)	> 2,03 mg/l OECD 403

Other information:

Boric acid (H3BO3) (10043-35-3)

Reproductive toxicity

LOAEL (animal/male, F0/P) 58.5 mg/kg

NOAEL (animal/male, F0/P) 17.5 mg/kg

Toxicological information of the product:

In case of ingestion of large amounts, NO3-ions contained in the product can oxidize the iron atoms in hemoglobin making it unable to carry oxygen effectively to the tissues (methemoglobinemia)

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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
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

Ammonium nitrate (6484-52-2)	
LC50 fish 1	447 mg/l 48h
EC50 Daphnia 1	490 mg/l 48h
EC50 72h algae (1)	1700 mg/l 240h
Boric acid (H3BO3) (10043-35-3)	
LC50 fish	79,7 mg/l
EC50 Daphnia	133 (115 - 153) mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms	175 mg/l
ErC50 (algae)	40 mg/l Pseudokirchneriella subcapitata
LOEC (chronic)	23 mg/l Fathead minnow, 32d
NOEC chronic fish	11,2 mg/l Fathead minnow, 32d
NOEC chronic crustacea	25,9 mg/l Hyalella azteca, 42d
NOEC chronic algae	>= 100 mg/l Agmenellum quadruplicatum, 10d

12.2. Persistence and degradability

Master 20-5-10+2	
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Ammonium nitrate (6484-52-2)	
BCF fish 1	(no bioaccumulation expected)

12.4. Mobility in soil

Master 20-5-10+2	
Ecology - soil	Expected to be highly mobile in soil.

12.5. Other adverse effects

No additional information available

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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 / ADN / NZS5433

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

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)**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

New Zealand (NZS 5433:2012)

Transport of Dangerous Goods on Land : 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

- Transport by sea

No data available

- Air transport

No data available

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- 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

15.1.2. National regulations

ACVM ACT 1997 : Exempt from registration under the Agricultural Compounds and Veterinary Medicines Act 1997

Classification: : Classified as hazardous according to the Hazardous Substances (Classification) Notice 2020, New Zealand

SECTION 16: Other information

Issue date: September 13, 2021

Full text of H- and EUH-statements:

Eye Irrit. 2 Serious eye damage/eye irritation, Category 2
 Ox. Sol. 3 Oxidising Solids, Category 3
 H272 May intensify fire; oxidiser
 H319 Causes serious eye irritation

Full text of H- and EUH-statements:	
Repr. 1B	Reproductive toxicity, Category 1B
H360FD	May damage fertility. May damage the unborn child.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Sol. 3	Oxidising Solids, Category 3
H272	May intensify fire; oxidiser
H319	Causes serious eye irritation

Abbreviations and acronyms:

SDS	Safety Data Sheet
CAS	Chemical Abstracts Service
GHS	Globally Harmonised System
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

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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 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.