SAFETY DATA SHEET
MICRO NP

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

1.1. Product identifier

Product form	:	Mixtures
Product name	:	MICRO NP
Product code	:	11832

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)
NZ POISON CENTRE CONTACT	: 111 Police, Ambulance and Fire Brigade (available in New Zealand only) 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
9.1C - Substances that are harmful in the aquatic environment (Chronic)

Hazard statement codes
H318 - Causes serious eye damage
H412 - Harmful to aquatic life with long lasting effects

Precautionary statement codes – Prevention:
P101 If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children.
P103 Read label before use
P273 - Avoid release to the environment
P280 - Wear protective gloves, eye protection, face shield

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
P310 - Immediately call a POISON CENTER or a doctor/physician

Precautionary statement codes – Disposal:
P501 - Dispose of contents/container to comply with applicable local, national and international regulation.

2.2. Label elements

Hazard pictograms (CLP) :

Signal word (CLP) : Danger

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Approval Status (NZIoC)
Superphosphates, concentrated	(CAS No) 65996-95-4	>= 25 - < 30	HSNO Approval Code HSR007344
Calcium sulfate	(CAS No) 7778-18-9	>= 20 - < 25	Approved for use as a component in a product covered by the group standard disclosed in section 15.
zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)	(CAS No) 7446-19-7	>= 0.5 - < 1%	HSNO Approval Code HSR003733
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 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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	:	Inhalation may cause irritation, cough, shortness of breath. Inhalation of fumes or vapours may cause respiratory irritation. Corrosive to the respiratory tract.
Symptoms/injuries after skin contact	:	Frequent or prolonged contact with skin may cause dermal irritation. Symptoms include redness, itching, and burning of the skin.
Symptoms/injuries after eye contact	:	Causes serious eye damage. Pain. redness, itching, tears.
Symptoms/injuries after ingestion	:	May cause gastric irritation. Vomiting. stomach pain.

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

No additional information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Carbon dioxide (CO_2). Water.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	Do not breathe fumes.
Hazardous decomposition products in case of fire	:	carbon oxides (CO and CO_2). Phosphorus oxides. Sulfur oxides. Nitrogen oxides.

5.3. Advice for firefighters

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

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 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 dust, fume, mist, vapours. Minimize generation of dust. 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.

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	:	Strong bases. Strong acids. Oxidising agents. reducing agents.
Heat and ignition sources	:	Keep away from open flames, hot surfaces and sources of ignition.
Information 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

Superphosphates, concentrated- (65996-95-4)		
Bulgaria	OEL TWA (mg/m³)	5 mg/m³

Calcium sulfate (7778-18-9)		
Austria	MAK (mg/m³)	5 mg/m³ (respirable fraction)
Austria	MAK Short time value (mg/m³)	10 mg/m³ (respirable fraction)
Belgium	Limit value (mg/m³)	10 mg/m³
Bulgaria	OEL TWA (mg/m³)	10 mg/m³
France	VME (mg/m³)	10 mg/m³
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	6 mg/m³ (respirable fraction)
Hungary	AK-érték	6 mg/m³ (respirable dust)
Ireland	OEL (8 hours ref) (mg/m³)	10 mg/m³
Ireland	OEL (15 min ref) (mg/m3)	30 mg/m³ (calculated)
Latvia	OEL TWA (mg/m³)	4 mg/m³ (hydrogenated-plaster dust)
Portugal	OEL TWA (mg/m³)	10 mg/m³ (inhalable fraction)
Slovakia	NPHV (priemerná) (mg/m³)	6 mg/m³
Slovenia	OEL TWA (mg/m³)	6 mg/m³ (respirable fraction)
Spain	VLA-ED (mg/m³)	10 mg/m³ (this value is for the particulate matter that is free from Asbestos and contains less than 1% of crystalline Silica)
Switzerland	VME (mg/m³)	3 mg/m³ (respirable dust)
New Zealand	WES (mg/m³)	10 mg/m³ (containing no asbestos and <1% crystalline silica-inhalable dust)

Calcium sulfate (7778-18-9)		
Australia	TWA (mg/m³)	10 mg/m³ (containing no asbestos and <1% crystalline silica-inhalable dust)
Canada (Quebec)	VEMP (mg/m³)	10 mg/m³ (containing no Asbestos and <1% Crystalline silica-total dust) 5 mg/m³ (containing no Asbestos and <1% Crystalline silica-respirable dust)
USA - ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (inhalable particulate matter)
USA - NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)
USA - OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)

Superphosphates, concentrated- (65996-95-4)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	17.4 mg/kg bodyweight/day
Acute - systemic effects, inhalation	3.1 mg/m³
Acute - local effects, inhalation	3.1 mg/m³
Long-term - systemic effects, dermal	17.4 mg/kg bodyweight/day
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	10.4 mg/kg bodyweight
Acute - systemic effects, inhalation	0.9
Acute - systemic effects, oral	2.1 mg/kg bodyweight
Long-term - systemic effects, inhalation	0.9 mg/m³
Long-term - systemic effects, dermal	10.4 mg/kg bodyweight/day

zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate) (7446-19-7)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	8.3 mg/kg bodyweight/day
Acute - systemic effects, inhalation	1 mg/m³
Long-term - local effects, dermal	8.3
Long-term - systemic effects, inhalation	1 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	1.3 mg/m³
Acute - systemic effects, oral	0.83 mg/kg bodyweight
Long-term - systemic effects, inhalation	1.3 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.02 mg/l (Derived for Zinc ion)
PNEC aqua (marine water)	0.006 mg/l (Derived for Zinc ion)
PNEC (Sediment)	
PNEC sediment (freshwater)	117.8 mg/kg dwt (Derived for Zinc ion)
PNEC sediment (marine water)	56.5 mg/kg dwt (Derived for Zinc ion)
PNEC (Soil)	
PNEC soil	35.6 mg/kg dwt (Derived for Zinc ion)
PNEC (STP)	
PNEC sewage treatment plant	0.05 mg/l (Derived for Zinc ion)

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.

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
Appearance	: Granular solid.
Colour	: brown.
Odour	: None.
Odour threshold	: No data available
pH	: No data available
pH solution	: 4 1% (t = 20°C)
Relative evaporation rate (butylacetate=1)	: No data available
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)	:	No data available
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	:	1 kg/l
Solubility	:	insoluble in: Water.
Log Pow	:	No data available
Viscosity, kinematic	:	not applicable, solid
Viscosity, dynamic	:	No data available
Explosive properties	:	Not expected to be explosive as none of the components is classified as explosive.
Oxidising properties	:	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

Ma react with urea to form urea-phosphate.

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. Avoid generation of dust.

10.5. Incompatible materials

Do not mix with alkali. Urea.

10.6. Hazardous decomposition products

During a fire: Carbon oxides (CO, CO2). Phosphorus oxides. Sulfur oxides. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Superphosphates, concentrated- (65996-95-4)	
LD50 oral rat	> 2000 mg/kg (OECD 425 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)

Superphosphates, concentrated- (65996-95-4)	
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (OECD 403 method)

zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate) (7446-19-7)	
LD50 dermal rat	> 2000 Van Huygevoort (1999a)

Skin corrosion/irritation : Not classified (Conclusive but not sufficient for classification)
Additional information : (OECD 439)
Serious eye damage/irritation : Causes serious eye damage.
Additional information : (OECD 437 method)
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 : Not classified

Superphosphates, concentrated- (65996-95-4)	
NOAEL (subacute, oral, animal/male, 28 days)	250 mg/kg bodyweight (OECD 422 method)

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Superphosphates, concentrated- (65996-95-4)	
LC50 fish 1	> 85.9 mg/l (OECD 203 method)
EC50 Daphnia 1	1790 mg/l 72h
EC50 72h Algae [mg/l] (1)	> 87.6 mg/l (OECD 201 method)
NOEC (acute)	100 mg/l (OECD 309 method)

zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate) (7446-19-7)	
EC50 other aquatic organisms 1	1.82 mg/l (48h, C. dubia) - EPA 821-R-02-012 Ref.: Hyne et al 2005
EC50 72h Algae [mg/l] (1)	3.73 mg/l (72h, Selenastrum capricornutum) - OCSE 201; Ref.: Van Ginneken, 1994

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

MICRO NP	
Bioaccumulative potential	Product does not contain any bioaccumulative substance.

12.4. Mobility in soil

MICRO NP	
Mobility in soil	In general, the mobility in the soil of the microelements in the mixture is influenced by several factors such as pH, CO2 concentration, redox conditions, and availability of organic and inorganic complexing agents.
Ecology - soil	If product enters soil, it will be mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB 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 / IATA / IMDG / RID / NZS 5433:2012 Transport of Dangerous Goods on Land

ADR	IMDG	IATA	ADN	NZS5433:2012
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Number of blue cones/lights (ADN) : 0

- Rail transport

No data available

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

Germany

VwVwS Annex reference : Water hazard class (WGK) 3, severe hazard to waters (Classification according to VwVwS, Annex 4)
12th Ordinance Implementing the Federal Immission Control Act - 12.BlmSchV : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Superphosphates, concentrated- is listed
SZW-lijst van mutagene stoffen : Superphosphates, concentrated- is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

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
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:

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
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H302	Harmful if swallowed
H318	Causes serious eye damage
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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

Eye Dam. 1	H318	Calculation method
Aquatic Chronic 3	H412	Calculation method

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