

FERTIGONIA 6-5-30

SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : FERTIGONIA 6-5-30

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

Use for agriculture (nutrients/ trace elements for plants)

1.3. Details of the supplier of the safety data sheet

Registered company name : AGRONUTRITION SAS..

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1.4. Emergency telephone number : +0800 764 766.

Association/Organisation : New Zealand National Poisons Centre : poisons@otago.ac.nz.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS compliant.

Serious eye damage, Category 1 (Eye Dam. 1, H318).

Hazardous to the aquatic environment - Acute hazard, Category 3 (Aquatic Acute 3, H402).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

GHS compliant.

Hazard pictograms :



GHS05

Signal Word :

DANGER

Product identifiers :

CAS 7778-80-5 POTASSIUM SULFATE

Hazard statements :

H318

Causes serious eye damage.

H402

Harmful to aquatic life.

Precautionary statements - General :

P102

Keep out of reach of children.

Precautionary statements - Prevention :

P264

Wash hands thoroughly after handling.

P280

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

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Precautionary statements - 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/doctor.

Precautionary statements - Disposal :

P501

Dispose of contents and container to hazardous or special waste disposal point.

2.3. Other hazards

In use, may form flammable/explosive dust-air mixture.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures****Composition :**

Identification	GHS	Note	%
CAS: 7778-80-5 EC: 231-915-5 REACH: 01-2119489441-34-XXXX POTASSIUM SULFATE	GHS05 Dgr Eye Dam. 1, H318		25 <= x % < 50
CAS: 7757-79-1 EC: 231-818-8 REACH: 012119488224-35-XXXX POTASSIUM NITRATE	GHS03 Wng Ox. Sol. 3, H272 Acute Tox. 5, H313		10 <= x % < 20
CAS: 6484-52-2 REACH: 01-2119490981-27-XXXX AMMONIUM NITRATE	GHS07, GHS03 Wng Ox. Sol. 3, H272 Acute Tox. 5, H303 Acute Tox. 5, H313 Eye Irrit. 2, H319	[XVII]	5 <= x % < 10
CAS: 7447-40-7 EC: 231-211-8 POTASSIUM CHLORIDE	Wng Acute Tox. 5, H303		1 <= x % < 10
INDEX: 029-023-00-4 CAS: 7758-99-8 Nom231-847231-847-6 EC: 231-847-6 REACH: 01-2119520566-40-XXXX COPPER SULPHATE PENTAHYDRATE	GHS07, GHS05, GHS09 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 M Acute = 10 Aquatic Chronic 1, H410 M Chronic = 1		0 <= x % < 0.1

Information on ingredients :

(Full text of H-phrases: see section 16)

[XVII] Substance soumise à restriction selon l'annexe XVII du règlement REACH (CE) n°1907/2006.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures**In the event of exposure by inhalation :**

Remove the victim to fresh air. In case of respiratory problems, consult a doctor/medical service.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of swallowing :

Seek medical attention, showing the label.

Give nothing by mouth. Do not induce vomiting.

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

Symptoms/lesions after inhalation: cough, respiratory tract irritation.
Symptoms/lesions after skin contact : skin irritation, redness.
Symptoms/lesions after eye contact : corrosion, irritation of eye tissues.
Symptoms/lesions after ingestion: abdominal pain, nausea.

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

Treat symptomatically.
Provide eye baths on site.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :
- sprayed water or water mist
- foam
- powder
- carbon dioxide (CO₂)

The choice of the method depends on the other products present.

Do not use a strong water jet, danger of spreading of the product.

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- nitrogen oxide (NO)
- ammonia (NH₃)

5.3. Advice for firefighters

Precautions against fire: like in case of all fires involving chemicals, wear appropriate protective equipment (chemical protective clothing, boots and gloves).

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.
Avoid breathing dust and wear an appropriate filter mask (see section 8).

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming) : do not generate dust.

6.4. Reference to other sections

See section 1 for information about emergency contact.
See section 13 for obtain additional information on waste treatment.
See section 8 for information on personal protection equipments.
See section 7 for information on safe handling.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.
Remove and wash contaminated clothing before re-using.
Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

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Avoid the formation and release of dust during handling and spreading.

Fire prevention :

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid eye contact with this mixture at all times.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product away from strong oxidizing agents and acids.

Storage

Keep out of reach of children.

Keep away from food, drink and animal feedingstuffs.

Store the product away from light and in the absence of moisture, in cool, well ventilated area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

No data available.

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

POTASSIUM NITRATE (CAS: 7757-79-1)

Final use:

Exposure method:

Potential health effects:

DNEL :

Workers.

Dermal contact.

Long term systemic effects.

20.8 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term systemic effects.

36.7 mg of substance/m3

Final use:

Exposure method:

Potential health effects:

DNEL :

Consumers.

Ingestion.

Long term systemic effects.

12.5 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Dermal contact.

Long term systemic effects.

12.5 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term systemic effects.

10.9 mg of substance/m3

POTASSIUM SULFATE (CAS: 7778-80-5)

Final use:

Exposure method:

Potential health effects:

DNEL :

Workers.

Dermal contact.

Long term systemic effects.

21.3 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL :

Inhalation.

Long term systemic effects.

37.6 mg of substance/m3

FERTIGONIA 6-5-30**Final use:**

Exposure method:
Potential health effects:
DNEL :

Exposure method:
Potential health effects:
DNEL :

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Long term systemic effects.
12.8 mg/kg body weight/day

Dermal contact.
Long term systemic effects.
12.8 mg/kg body weight/day

Inhalation.
Long term systemic effects.
11.1 mg of substance/m³

Predicted no effect concentration (PNEC):**POTASSIUM NITRATE (CAS: 7757-79-1)**

Environmental compartment: Fresh water.
PNEC : 0.45 mg/l

Environmental compartment: Sea water.
PNEC : 0.045 mg/l

Environmental compartment: Intermittent waste water.
PNEC : 4.5 mg/l

Environmental compartment: Waste water treatment plant.
PNEC : 18 mg/l

POTASSIUM SULFATE (CAS: 7778-80-5)

Environmental compartment: Fresh water.
PNEC : 0.68 mg/l

Environmental compartment: Sea water.
PNEC : 0.068 mg/l

Environmental compartment: Intermittent waste water.
PNEC : 6.8 mg/l

Environmental compartment: Waste water treatment plant.
PNEC : 10 mg/l

8.2. Exposure controls**Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

Prescription glasses are not considered as protection.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

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Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid inhaling dust.

Type of FFP mask :

Wear a disposable half-mask dust filter in accordance with standard EN149/A1.

Category :

- FFP2

If the implementation of the product is generating dust formation it is recommended to wear a respirator, properly fitted complying with an approved regulations (according to EN143) standard if a risk assessment indicates this is necessary.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

No data available.

Physical state

Physical state : Powder or dust.

State Soluble powder (SP)

Colour

Color White

Odour

Odour threshold : Not stated.

Melting point

Melting point/melting range : Not relevant.

Freezing point

Freezing point / Freezing range : Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range : Not relevant.

Flammability

Flammability (solid, gas) : Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) : Not stated.

Explosive properties, upper explosivity limit (%) : Not stated.

Flash point

Flash point interval : Not relevant.

Auto-ignition temperature

Self-ignition temperature : Not relevant.

Decomposition temperature

Decomposition point/decomposition range : Not relevant.

pH

pH (aqueous solution) : 3.04+/-0.6 (10 g/l)

pH : Not relevant.

Kinematic viscosity

Viscosity : Not stated.

Solubility

Water solubility : Soluble.

Fat solubility : Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water : Not stated.

Vapour pressure

Vapour pressure (50°C) : Not relevant.

Density and/or relative density

Density : 1.085 +/-1.5%

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Relative vapour density

Vapour density : Not stated.

9.2. Other information

No additional information.

9.2.1. Information with regard to physical hazard classes

Mixture not classified on physical hazards

9.2.2. Other safety characteristics

No additional information.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No dangerous reaction known under normal conditions of use and storage.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

According to our knowledge, this product does not present any particular hazard under normal conditions of use and storage.

10.4. Conditions to avoid

Avoid :

- formation of dusts

Dusts can form an explosive mixture with air.

10.5. Incompatible materials

Keep away from :

- strong oxidising agents

- strong acids

10.6. Hazardous decomposition products

The product does not decompose when used for its intended purpose.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

11.1.1. Substances

Acute toxicity :

COPPER SULPHATE PENTAHYDRATE (CAS: 7758-99-8 Nom231-847231-847-6)

Oral route : LD50 = 481 mg/kg

POTASSIUM CHLORIDE (CAS: 7447-40-7)

Oral route : LD50 = 3020 mg/kg
Species : Rat

AMMONIUM NITRATE (CAS: 6484-52-2)

Oral route : LD50 = 2950 mg/kg
Species : Rat

Dermal route : LD50 = 5000 mg/kg
Species : Rat

POTASSIUM NITRATE (CAS: 7757-79-1)

Oral route : LD50 > 3750 mg/kg
Species : Rat

Dermal route : LD50 = 5000 mg/kg
Species : Rat

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Inhalation route (Dusts/mist) :	LC50 = 527 mg/m3
POTASSIUM SULFATE (CAS: 7778-80-5) Oral route :	LD50 > 2000 mg/kg Species : Rat OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
Dermal route :	LD50 > 2000 mg/kg Species : Rat OECD Guideline 402 (Acute Dermal Toxicity)
Inhalation route (Dusts/mist) :	LC50 = 3.6 mg/m3 Species : Rat

Respiratory or skin sensitisation :

POTASSIUM SULFATE (CAS: 7778-80-5) Local lymph node stimulation test :	Non-Sensitiser. Species : Mouse OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
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Germ cell mutagenicity :

POTASSIUM SULFATE (CAS: 7778-80-5)	No mutagenic effect.
Mutagenesis (in vitro) :	Negative. OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)

Carcinogenicity :

POTASSIUM SULFATE (CAS: 7778-80-5) Carcinogenicity Test :	Negative. No carcinogenic effect. Species : Rat OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
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Reproductive toxicant :

POTASSIUM SULFATE (CAS: 7778-80-5) Study on development :	Species : Rat OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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Specific target organ systemic toxicity - repeated exposure :

POTASSIUM SULFATE (CAS: 7778-80-5) Oral route :	C > 1500 mg/kg bodyweight/day Species : Rat Duration of exposure : 28 days OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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11.1.2. Mixture**Acute toxicity :**

Not classified. Based on the available data, the classification criteria are not met.

Skin corrosion/skin irritation :

Not classified. Based on the available data, the classification criteria are not met.

Serious damage to eyes/eye irritation :

Causes severe eye damage.

Respiratory or skin sensitisation :

Not classified. Based on the available data, the classification criteria are not met.

Germ cell mutagenicity :

Not classified. Based on the available data, the classification criteria are not met.

FERTIGONIA 6-5-30**Carcinogenicity :**

Not classified. Based on the available data, the classification criteria are not met.

Reproductive toxicant :

Not classified. Based on the available data, the classification criteria are not met.

Specific target organ systemic toxicity - single exposure :

Not classified. Based on the available data, the classification criteria are not met.

Specific target organ systemic toxicity - repeated exposure :

Not classified. Based on the available data, the classification criteria are not met.

Aspiration hazard :

Not classified. Based on the available data, the classification criteria are not met.

11.2. Information on other hazards**SECTION 12 : ECOLOGICAL INFORMATION**

Harmful to aquatic organisms.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity**12.1.1. Substances****POTASSIUM SULFATE (CAS: 7778-80-5)**

Fish toxicity :

LC50 = 680 mg/l

Species : Pimephales promelas

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 720 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

Algae toxicity :

ECr50 = 2700 mg/l

Duration of exposure : 72 h

POTASSIUM CHLORIDE (CAS: 7447-40-7)

Fish toxicity :

LC50 = 2300 mg/l

Species : Leuciscus idus

Duration of exposure : 48 h

Crustacean toxicity :

EC50 = 825 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

Algae toxicity :

ECr50 = 2500 mg/l

Species : Pseudokirchnerella subcapitata

Duration of exposure : 72 h

AMMONIUM NITRATE (CAS: 6484-52-2)

Fish toxicity :

LC50 = 447 mg/l

Duration of exposure : 48 h

Crustacean toxicity :

EC50 = 490 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

POTASSIUM NITRATE (CAS: 7757-79-1)

Fish toxicity :

LC50 = 1378 mg/l

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 490 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

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12.1.2. Mixtures

Harmful to aquatic life.

12.2. Persistence and degradability

12.2.1. Substances

POTASSIUM CHLORIDE (CAS: 7447-40-7)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

POTASSIUM NITRATE (CAS: 7757-79-1)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

12.2.2. Mixtures

No information is available on the persistence and degradability of the product.

12.3. Bioaccumulative potential

12.3.2. Mixtures

No bioaccumulation data is available.

12.4. Mobility in soil

No information is available on mobility in soil. It is therefore essential to avoid at all costs that it spills into sewers or waterways. Prevent it from entering the ground.

12.5. Results of PBT and vPvB assessment

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

12.6. Endocrine disrupting properties

The mixture does not contain substances identified as disrupting the endocrine system for the environment $\geq 0.1\%$.

12.7. Other adverse effects

The mixture does not contain substances evaluated as dangerous for the ozone layer.

SECTION 13 : DISPOSAL CONSIDERATIONS

The appropriate waste management of the mixture and/or its container must be determined in accordance with local regulations.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Local arrangements :

Product must be disposed of in accordance with local and national regulations.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

FERTIGONIA 6-5-30**14.6. Special precautions for user**

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

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SECTION 15 : REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

The following regulations have been used:

- Globally Harmonized System of Classification and Labelling of Chemicals (GHS), review no. 8 (2019)

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H313	May be harmful in contact with skin.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Abbreviations :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TMP : French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

GHS05 : Corrosion

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.