

FERTIGATE O (CI FREE)

I.O IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name FERTIGATE O (CI FREE)

1.2 Uses and advised against

Recommended use ALL-PURPOSE FERTIGATION FERTILISER

1.3 Details of the supplier of the product

Supplier Grochem (AgriNova New Zealand Limited)

Company no. 9429036821501

Address 15 Sunlight Grove, Porirua, New Zealand

Telephone +64 4 237 0905 **Facsimile** +64 4 237 0906

Emailgrochem@grochem.comWebsitewww.grochem.com

1.4 Emergency telephone number(s)

Emergency New Zealand

0800 CHEMCALL - 24 hours

(0800 243 6225)

Australia 1800 127 406 Other locations

+64 4 917 9888

or The National Poisons Centre

0800 POISON (0800 764 766)

1.5 Date of preparation

Date of preparation 06 May 2019

2.0 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

THIS MATERIAL IS HAZARDOUS ACCORDING TO CRITERIA OF EPA NEW ZEALAND.

Dangerous good classification Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods

by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous good class 5.

2.2 GHS label elements

Signal word WARNING







Hazard classification(s) 5.1.1C Oxidising substances that are liquids or solids

6.1E Substances that are acutely toxic - Oral

6.3B Substances that are mildly irritating to the skin

6.4A Substances that are irritating to the eye



	6.8B	Substances that are suspected human reproductive or developmental toxicants
	9.3C	Substances that are harmful to terrestrial vertebrates
Hazard statement(s)	H272	May intensify fire; oxidizer.
	H303	May be harmful if swallowed.
	H316	Causes mild skin irritation.
	H319	Causes serious eye irritation.
	H361	Suspected of damaging fertility or the unborn child.
	H433	Harmful to terrestrial vertebrates.
Prevention precautionary	P102	Keep out of reach of children.
statement(s)	P103	Read label before use.
	P201	Obtain special instructions before use.
	P202	Do not handle until all safety precautions have been read and understood.
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P220	Keep/store away from clothing/combustible materials.
	P221	Take any precaution to avoid mixing with combustibles.
	P264	Wash hands, face and all exposed skin thoroughly after handling.
	P273	Avoid release to the environment.
	P281	Use personal protective equipment as required.
Response precautionary statement(s)	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.
	P308+P313	If exposed or concerned: Get medical advice/attention.
	P312	Call a poison centre or doctor/physician if you feel unwell.
	P332+P313	If skin irritation occurs: Get medical advice/attention.
	P337+P313	If eye irritation persists: Get medical advice/attention.
	P370+P378	In case of fire: See section 5.2 for extinction.
Storage precautionary statement	P405	Store locked up.
Disposal precautionary statement	P501	Dispose of contents/container in accordance with local, regional, national and international regulations.

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances/mixtures

Ingredient	CAS number	Proportion
Sulfuric acid, dipotassium salt	7778-80-5	25-40% (w/w)
Nitric acid, potassium salt	7757-79-1	25-40% (w/w)
Phosphoric acid, monoammonium salt	7722-76-1	10-15% (w/w)
Phosphoric acid, monopotassium salt	7778-77-0	5-10% (w/w)
Sulfuric acid, magnesium salt (1:1)	7487-88-9	10-20% (w/w)
Boric acid (H3BO3)	10043-35-3	>0.10% (w/w)
Ingredients determined to be non-hazardous		to 100%

4.0 FIRST AID MEASURES

4.1 Description of first aid measures

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation

Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.



Skin contact If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If

swelling, redness, blistering or irritation occurs seek medical assistance. For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until

advised to stop by the Poisons Information Centre or a Doctor; or for at least 15 minutes and transport to

Doctor or Hospital.

Ingestion Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give

anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

PPE for first aiders Wear overalls, gloves, safety glasses. Available information suggests that gloves made from natural rubber

should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician Treat symptomatically.

5.0 FIRE FIGHTING MEASURES

5.1 Hazchem code

1Y

5.2 Suitable extinguishing media

If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

5.3 Specific hazards

May intensify fire; oxidiser.

5.4 Firefighting further advice

On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6.0 ACCIDENTAL RELEASE MEASURES

6.1 Small spills

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

6.2 Large spills

If safe to do so, shut off all possible sources of ignition. Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up but avoid generating dust. Use a spark-free shovel. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

6.3 Dangerous goods - Initial emergency response guide no.

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7.0 HANDLING AND STORAGE

7.1 Handling

Handlight practices Avoid eye contact and skin contact. Avoid inhalation of dust.

7.2 Storage

Site requirementsStore in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Store

locked up. Keep container standing upright. Keep containers closed when not in use - check regularly for spills.

This material is classified as a Division 5.1 Oxidising Substance as per the criteria of the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and/or the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and must be stored in accordance with the relevant regulations.



8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 National occupational exposure limits

Workplace exposure guidelines

No value assigned for this specific material by WorkSafe New Zealand.

8.2 Biological limit values

Biological limit values As per the WorkSafe New Zealand the ingredients in this material do not have a Biological Limit Allocated.

8.3 Engineering controls

Exposure control methods Natural ventilation should be adequate under normal use conditions.

8.4 Personal Protective Equipment (PPE)

Detail specifications for equipment

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear overalls, gloves, safety glasses. Available information suggests that gloves made from natural rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using. Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.







9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form Powder

Colour Orange

Odour Distinctive

Solubility Soluble in water

Specific gravity N/A

Density N/A

Oxidising properties Oxidising solid - will intensify fire

N/A: Not applicable

10.0 STABILITY AND REACTIVITY

10.1 Chemical stability

Will decompose when heated (fire) or in contact with corrosives (acid or alkali).

10.2 Conditions to avoid

Fire will burn with greater intensity.

10.3 Incompatible materials

Corrosives, organic compounds.

10.4 Hazardous decomposition products

Oxides of sulphur, phosphorus and nitrogen.

10.5 <u>Hazardous reactions</u>

No known hazardous reactions.



TOXICOLOGICAL INFORMATION 11.0

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

<u>11.1</u> **Acute effects**

Inhalation Material may be an irritant to mucous membranes and respiratory tract.

Skin contact Contact with skin may result in irritation.

Ingestion Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact An eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical

irritation to the eyes.

<u>11.2</u> **Acute toxicity**

Inhalation This material has been classified as non-hazardous.

Acute toxicity estimate (based on ingredients): LC50 > 5.0 mg/L

This material has been classified as non-hazardous. Skin contact

Acute toxicity estimate (based on ingredients): >5,000 mg/Kg bw

This material has been classified as a 6.1E - Substances that are acutely toxic. Ingestion

Acute toxicity estimate (based on ingredients): 2,000 - 5,000 mg/Kg bw

Corrosion/irritancy Eye: this material has been classified as a 6.4A - Substances that are irritating to the eye.

Skin: this material has been classified as a 6.3B - Substances that are mildly irritating to the skin.

Sensitisation Inhalation: this material has been classified as not a respiratory sensitiser.

Skin: this material has been classified as not a skin sensitiser.

This material has been classified as non-hazardous. **Aspiration hazard** This material has been classified as non-hazardous. Specific target organ

toxicity (single exposure)

Chronic toxicity 11.3

Mutagenicity This material has been classified as non-hazardous. Carcinogenicity This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation) This material has been classified as a 6.8B - Substances that are suspected human reproductive

or developmental toxicants.

Specific target organ toxicity (repeat exposure) This material has been classified as non-hazardous.

ECOLOGICAL INFORMATION 12.0

Avoid contaminating waterways.

<u>12.1</u> **Acute aquatic hazard**

This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

12.2 Long-term aquatic hazard

This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data. Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log Kow < 4.

12.3 **Ecotoxicity in the soil environment**

This material has been classified as non-hazardous.

12.4 **Ecotoxicity to terrestrial vertebrates**

This material has been classified as a 9.3C - Substances that are harmful to terrestrial vertebrates

Ecotoxicity to terrestrial invertebrates 12.5

This material has been classified as non-hazardous.



12.6 Ecotoxicity

No information available.

12.7 Persistence and degradability

No information available.

12.8 Bioaccumulative potential

No information available.

12.9 Mobility

No information available.

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal

protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible, material and its container should be recycled. If material or container cannot be recycled, dispose

in accordance with local, regional, national and international Regulations.

14.0 TRANSPORT INFORMATION

14.1 Road and rail transport

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

UN no 1479
Dangerous goods class 5.1
Packing group III
Hazchem code 1Y



Emergency response

guide no

31

Proper shipping name

Oxidizing solid, N.O.S. (fertiliser containing nitrate)

Segregration dangerous

goods

Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), toxic gases (Class 2.3), flammable liquids (Class 3), flammable solids (Class 4.1), spontaneously combustible substances (Class 4.2), dangerous when wet substances (Class 4.3), organic peroxides (Class 5.2), radioactive substances (Class 7), corrosive substances (Class 8), fire risk substances or combustible liquids. Also note that fire risk substances including dangerous goods of Class 6 or Class 9 which are fire risk substances are incompatible with dangerous goods of Class 1, Class 5.1 and Class 5.2. Exemptions may apply.

14.2 Marine transport

 $Classified \ as \ Dangerous \ Goods \ by \ the \ criteria \ of \ the \ International \ Maritime \ Dangerous \ Goods \ Code \ (IMDG \ Code) \ for \ transport \ by \ sea.$

UN no 1479
Dangerous goods class 5.1
Packing group III

Proper shipping name Oxidizing solid, N.O.S. (fertiliser containing nitrate)



14.3 Air transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN no 1479
Dangerous goods class 5.1
Packing group III

Proper shipping name Oxidizing solid, N.O.S. (fertiliser containing nitrate)





14.4 Special precautions

Do not carry more than 5 kg on a passenger service vehicle.

15.0 REGULATORY INFORMATION

15.1 Regulatory status

This substance is approved Pursuant to the HSNO Act 1996, under the Fertilisers (Oxidising [5.1.1]) Group Standard 2006 **HSR002570**

15.2 Trigger quantities

SDS must be available for Any quantity
Location certificate 100 kg
Signage 1,000 kg
Fire extinguishers (x2) 500 kg
Emergency plan 1,000 kg

16.0 OTHER INFORMATION

Revision due 05 May 2024

Additional information This information was prepared in good faith from the best information available at the time of issue. It is

based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of

this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any

hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.

<u>Glossary</u>

ACVM Agricultural Compounds and Veterinary Medicines

CAS Chemical Abstract Services number (used to identify chemical compounds)

HSNO Hazardous Substances and New Organisms (legislation 1996)

LD50 Lethal Dose fatal to 50% of test animals/organisms

LC50 Lethal Concentration fatal to 50% of test animals/organisms