

FERTIGATE W

1.0 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name FERTIGATE W

1.2 Uses and advised against

Recommended use 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

Email grochem@grochem.com

Website www.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 01 September 2019

2.0 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

HSNO approval code HSR002570 - FERTILISERS (OXIDISING [5.1.1]) GROUP STANDARD

Dangerous goods 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 goods class 5.1

2.2 GHS label elements

Signal word WARNING



Hazard classification(s)	5.1.1C	Oxidising substances that are liquids or solids
	6.1D	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
	9.3C	Substances that are harmful to terrestrial vertebrates
Hazard statement(s)	H272	May intensify fire; oxidizer.
	H302	Harmful if swallowed.
	H316	Causes mild skin irritation.
	H319	Causes serious eye irritation.
	H433	Harmful to terrestrial vertebrates.
Prevention precautionary statement(s)	P102	Keep out of reach of children.
	P103	Read label before use.
	P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
	P220	Keep/Store away from clothing/combustible materials/(insert appropriate material).
	P221	Take any precaution to avoid mixing with combustibles/(insert incompatible materials).
	P264	Wash hands, face and all exposed skin thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P273	Avoid release to the environment.
	P280	Wear protective clothing, gloves, eye/face protection and suitable respirator.
Response precautionary statement(s)	P101	If medical advice is needed, have product container or label at hand.
	P301+P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P330	Rinse mouth.
	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: Use (insert appropriate media) for extinction.
Storage precautionary statement(s)	Not allocated	
Disposal precautionary statement(s)	P501	Dispose of contents/container in accordance with local, regional, national and international regulations.

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances/mixtures

Chemical entity	CAS number	Proportion
Nitric acid, potassium salt	7757-79-1	50 - 70 % (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. Immediately call Poisons Centre or Doctor.
PPE for first aiders	Wear overalls, gloves, safety glasses. 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

Handling practices

Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of dust.

7.2 Storage

Site requirements

Store 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. 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. 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 repeated or prolonged 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	Crystalline powder
Colour	Off white
Odour	Distinctive
Solubility	Soluble
pH	Typically ~ 4-5 in solution

10.0 STABILITY AND REACTIVITY

10.1 Chemical stability

This material is thermally stable when stored and used as directed.

10.2 Conditions to avoid

Elevated temperatures and sources of ignition.

10.3 Incompatible materials

Corrosives (acids and alkalis), organic compounds

10.4 Hazardous decomposition products

Oxides of carbon and nitrogen, smoke and other toxic fumes.

10.5 Hazardous reactions

No known hazardous reactions.

11.0 TOXICOLOGICAL INFORMATION

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:

11.1 Acute effects

Inhalation	Material may be an irritant to mucous membranes and respiratory tract.
Skin contact	Contact with skin may result in irritation.

Ingestion Harmful if swallowed. 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.

11.2 Acute toxicity

Inhalation This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): LC50 > 5.0 mg/L

Skin contact This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >5,000 mg/Kg bw

Ingestion This material has been classified as a 6.1D - Substances that are acutely toxic. Acute toxicity estimate (based on ingredients): 300 - 2,000 mg/kg bw. Calculated value: 1440 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.

Aspiration hazard This material has been classified as non-hazardous.

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

11.3 Chronic toxicity

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 non-hazardous.

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

12.0 ECOLOGICAL INFORMATION

Avoid contaminating waterways.

12.1 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.

12.5 Ecotoxicity to terrestrial invertebrates

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	14.2 Marine transport	14.3 Air transport
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".	Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.	Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
UN number	1479	1479	1479
Dangerous goods class	5.1	5.1	5.1
Packing group	III	III	III
Hazchem code	1Y	-	-
Emergency response guide number	31	-	-
Proper shipping name	Oxidizing solid, N.O.S. (Fertiliser containing nitrate)	Oxidizing solid, N.O.S. (Fertiliser containing nitrate)	Oxidizing solid, N.O.S. (Fertiliser containing nitrate)
Segregation 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.	-	-

15.0 REGULATORY INFORMATION

15.1 Regulatory status

All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC). Approved pursuant to the HSNO Act 1996. See www.epa.govt.nz for approval conditions.

15.2 Trigger quantities

EPA group standard HSR002570 - Fertilisers (Oxidising [5.1.1]) Group Standard

Certified handler No

Location test certificate	Yes
Fire extinguishers	Yes
Signage	Yes
Emergency response	Yes
Hazardous atmosphere zone	No

16.0 OTHER INFORMATION

Revision due 01 September 2024

Glossary

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

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.