

Meteor®

1.0 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name Meteor®

1.2 Uses and advised against

Recommended use THINNING AGENT FOR APPLES

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 02 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 HSR101023

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 9

2.2 GHS label elements

Signal word WARNING



Hazard classification(s)	6.1D	Substances that are acutely toxic - Oral.
	6.1D	Substances that are acutely toxic - Dermal.
	6.1D	Substances that are acutely toxic - Inhalation - vapours, dusts or mists.
	6.3B	Substances that are mildly irritating to the skin.
	9.1A	Substances that are very ecotoxic in the aquatic environment (H400).
	9.2A	Substances that are very ecotoxic in the soil environment.
	9.3C	Substances that are harmful to terrestrial vertebrates.
Hazard statement(s)	H302	Harmful if swallowed.
	H312	Harmful in contact with skin.
	H316	Causes mild skin irritation.
	H332	Harmful if inhaled.
	H400	Very toxic to aquatic life.
	H421	Very toxic to the soil environment.
	H433	Harmful to terrestrial vertebrates.
Prevention precautionary statement(s)	P102	Keep out of reach of children.
	P103	Read label before use.
	P261	Avoid breathing dust, fume, gas, mist, vapours or spray.
	P264	Wash hands, face and all exposed skin thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	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.
	P302+P352	IF ON SKIN: Wash with plenty of soap and water.
	P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
	P322	Specific measures (see product label).
	P330	Rinse mouth.
	P332+P313	If skin irritation occurs: Get medical advice/attention.
	P363	Wash contaminated clothing before reuse.
	P391	Collect spillage.
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
Metamitron	41394-05-2	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. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.
Skin contact	This material, or a component of the material, can be absorbed through the skin with resultant toxic effects. 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.
Eye contact	If in eyes wash out immediately with water. In all cases of eye contamination, it is a sensible precaution to seek medical advice.
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 rubber boots, overalls, gloves, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from 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

2Z

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

Non-combustible material.

5.4 Firefighting further advice

Not applicable.

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

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. 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 skin contact. Avoid inhalation of dust.

Apply product carefully. Spray drift may cause serious damage to other desirable plants. A buffer zone of 15m between the application area and any downwind area containing non-target plants must be observed when applying this substance.

This substance shall be applied via ground-based methods only.

The restricted entry interval is 4 days without gloves, or 1 day with gloves.

Despite the points above, workers may enter the application area after the spray has dried if they are wearing the same personal protective equipment that would be required if they were applying the substance.

The maximum application rate of this substance is 740 g of substance/ha (equivalent to 518 g metamitron/ha) per application, with a maximum application frequency of twice per year, with a minimum interval period of 5 days between applications.

7.2 Storage

Site requirements

Store locked up 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. Secondary containment required - as a class 9 substance with ecotoxicity classifications, storage must be carried out in such a manner as to prevent contamination of waterways. It is recommended that the NZ Standard for the Management of Agrichemicals (NZS8409) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management Regulations.

This material is classified as a Class 9 Miscellaneous Dangerous Good 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

WorkSafe NZ have set a WES value for Kaolin (a component of Meteor) as follows:

Inhalable Dust: 10mg/m³

Respirable Dust: 2mg/m³

No EELs are set for any component of Meteor at this time as the risk of adverse effects to the environment has been qualitatively assessed as negligible, provided users demonstrate compliance with the controls set out in this SDS.

8.2 Biological limit values

Biological limit values

As per 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 rubber boots, overalls, gloves, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

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

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	Granules
Colour	Grey
Odour	Faint
Solubility	Dispersible
Vapour pressure (20°C)	0.86 µPa
Flash point (°C)	Non flammable
Boiling point/range (°C)	Not applicable
pH	6.5 - 8.5 (1% soln.)

10.0 STABILITY AND REACTIVITY

10.1 Chemical stability

This material is thermally stable when stored and used as directed. Thermally decomposes at 170°C.

10.2 Conditions to avoid

Elevated temperatures and sources of ignition.

10.3 Incompatible materials

Oxidising agents, acids and alkalis.

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	Harmful if inhaled. Material may be an irritant to mucous membranes and respiratory tract.
Skin contact	Harmful in contact with skin. Can be absorbed through the skin with resultant toxic effects. 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	May be 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 a 6.1D - Substances that are acutely toxic. Acute toxicity: LC50 (Mouse): 0.206 mg/L
Skin contact	This material has been classified as a 6.1D - Substances that are acutely toxic. Acute toxicity: LD50 (Rat): 1000 mg/kg
Ingestion	This material has been classified as a 6.1D - Substances that are acutely toxic. Acute toxicity: LD50 (dog): 650 mg/kg
Corrosion/irritancy	Eye: this material has been classified as not corrosive or irritating to eyes. 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

9.1A - Substances that are very ecotoxic in the aquatic environment. Acute toxicity estimate (based on ingredients): <1 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 a 9.2A - Substances that are very ecotoxic in the soil environment.

12.4 Ecotoxicity to terrestrial vertebrates

This material has been classified as a 9.3C - Substances that are harmful to terrestrial vertebrates: Oral LD50 (mouse): 650 mg/kg

12.5 Ecotoxicity to terrestrial invertebrates

Toxicity to Algae: ErC50 = 0.22mg/L

12.6 Persistence and degradability

Soil DT50 > 30 days: ND

12.7 Bioaccumulative potential

No information available.

12.8 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 packaging should be recycled. If not, dispose in accordance with local, regional, national and international Regulations. Avoid contamination of any water supply with chemical or empty packaging.

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. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.	Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
UN number	3077	3077	3077
Dangerous goods class	9	9	9
Packing group	III	III	III
Hazchem code	2Z	-	-
Marine pollutant	Yes	-	-
Emergency reponse guide number	47	-	-
Proper shipping name	Environmentally hazardous substance, solid, N.O.S (Metamitron)	Environmentally hazardous substance, solid, N.O.S (Metamitron)	Environmentally hazardous substance, solid, N.O.S (Metamitron)
Special precautions	Maximum 10 kg permitted to be carried on a Passenger Service Vehicle	-	-
Segregation dangerous goods	Not to be loaded with explosives (Class 1). Note 1: Materials that are fire risks are incompatible with oxidising agents (Class 5.1) or organic peroxides (Class 5.2). Exemptions may apply.	-	-

15.0 REGULATORY INFORMATION

15.1 Regulatory status

Registered pursuant to the ACVM Act 1997, No P9024. See www.foodsafety.govt.nz for registration conditions.

Approved pursuant to the HSNO Act 1996, Approval Code **HSR101023**. See www.epa.govt.nz for approval conditions.

All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC).

15.2 Trigger quantities

Approved handler	No
Location test certificate	No
Fire extinguishers	No
Signage	Yes (≥ 100 kg)
Emergency response	Yes (≥ 100 kg)
Hazardous atmosphere zone	No

16.0 OTHER INFORMATION

Revision due 02 September 2024

Glossary

ACVM	Agricultural Compounds and Veterinary Medicines
CAS	Chemical Abstract Services number (used to identify chemical compounds)
EEL	Environmental Exposure Limit

EPA	Environmental Protection Authority
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
PPE	Personal Protective Equipment
WES	Workplace Exposure Limit

This SDS summarises our best knowledge of the health and safety hazard information available for this product and how to safely handle and use it. Since the use of this information and the conditions of the use of this product are not under the control of Grochem, it is the user's responsibility to determine conditions of safe use of the product.

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.