

Meteor®

Section 1: Identification of the Substance or Mixture and of the Supplier

Product name:	Meteor®
Recommended use:	Thinning Agent for Apples
Company details:	Grochem (AgriNova New Zealand Limited) 15 Sunlight Grove Porirua New Zealand
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Date of preparation:	24 July 2015

Section 2: Hazards Identification

Hazard classification:	Dangerous Goods: Class 9 – Miscellaneous Dangerous Goods
Dangerous Goods (Transport)	Class 9 – Miscellaneous Dangerous Goods
Hazardous substances (HSNO)	6.1B (DANGER: Fatal if inhaled) 6.1D (WARNING: Harmful if swallowed and in contact with skin) 6.3B (WARNING: Causes mild skin irritation) 9.1A (WARNING: Very toxic to aquatic life with long lasting effects) 9.2A (WARNING: Very toxic to soil environment) 9.3C (Harmful to terrestrial vertebrates)



Section 3: Composition/Information on Ingredients

Classification & type: Pure substance

Material	CAS No.	Proportion (%w)
Metamitron	41394-05-2	70%
Non-Hazardous components		to 100%

Section 4: First Aid Measures

Symptoms of exposure	No adverse health effects expected if the product is handled in accordance with this SDS and the product label. Symptoms that may arise if the product is mishandled are:
If Swallowed:	Harmful if swallowed.
If on Skin:	Harmful in contact with skin. Causes mild skin irritation.
If Inhaled:	Fatal if inhaled.
First aid actions	
If Swallowed:	Call a POISON CENTRE or doctor/physician if you feel unwell. Rinse mouth.
If in Eye:	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
If on Skin:	Wash with plenty of soap and water. Call a POISON CENTRE or doctor/physician if you feel unwell. If skin irritation occurs: Get medical advice/attention.
If Inhaled:	Remove to fresh air and keep at rest in a position comfortable for breathing.
Workplace facilities	Emergency showers, eyewash and general hygiene facilities must be available.
Notes for medical personnel	Treat symptomatically and give supportive therapy.

Section 5: Fire Fighting Measures

Type of hazard:	Not flammable.
HAZCHEM Code:	2X.
Combustion products:	May emit toxic and irritating fumes (hydrogen cyanide and nitrogen oxides).
Extinguishing media & methods:	Dry chemical, foam, water spray, CO ₂
Recommended protective clothing:	Self contained breathing apparatus.

Section 6: Accidental Release Measures

Personal protection:	See Section 8.3 for appropriate PPE.
Containment and clean up:	Exclude all bystanders from the vicinity of the spill and prevent material from entering waterways. Sweep up spill and place in waste container. Absorb liquid spills with an inert material (such as vermiculite, earth, sand) and place in waste containers. Wash area with water and alkaline detergent then absorb any remaining liquid with further inert material. Dispose of waste safely in an approved landfill.
Special requirements:	See Section 13 for instructions for the disposal of waste/contaminated material.

Section 7: Handling and Storage

Subsection 1:	Handling
Handling practices	<p>Wear appropriate PPE as detailed in Section 8.3.</p> <p>This product is deemed to be a tracked substance and must be under the control of an approved handler at all times.</p> <p>Do not breathe dust/vapours/fume/spray mist.</p> <p>Do not eat, drink or smoke whilst using this product.</p> <p>Take off contaminated clothing and wash before reuse.</p> <p>Wash thoroughly after handling.</p> <p>Keep out of reach of children.</p> <p>Read label before use.</p> <p>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.</p>

This substance must not be applied into or onto water. A strategy to minimise spray drift should be employed at all times when applying the spray near aquatic environments.

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

A minimum re-entry interval for this substance is set at 28 days after the end of the application of the substance (22 days for re-entry with gloves).

This substance must not be applied at rates exceeding 700g Metamitron/ha per application, more than twice per year with a minimum interval of five days between applications.

Subsection 2:

Site requirements

Storage

Store locked up in a well ventilated place in the original container in a cool dry place, out of direct sunlight and away from stock feed, seeds, fertiliser or foodstuffs.

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.

Section 8: Exposure Controls/Personal Protection

Subsection 1:

Workplace Exposure Guidelines (may also be considered in section 2)

Workplace exposure standards

WorkSafe NZ have set a WES value for Kaolin (a component of Meteor) as follows:
Inhalable Dust: 10mg/m³
Respirable Dust: 2mg/m³

Exposure Standards outside the workplace

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.

Subsection 2:

Engineering Controls

Exposure control measures

Use only in a well ventilated area.
Not to be used in an enclosed space.

Subsection 3:

Personal Protective Equipment (PPE)

Detail specifications for equipment

Wear full PPE (chemical resistant gloves, safety glasses/visor, coveralls, chemical resistant boots, respirator).

General hygiene

Always wash after handling, before eating and after work.

Section 9: Physical and Chemical Properties

Appearance	Grey water dispersible granule	Boiling point (degC)	N/A
Odour	Faint odour	Freezing point (degC)	N/A
Specific gravity (kg/L)	N/A	Flashpoint (degC)	Non flammable
Solubility	Dispersible in water	Vapour Pressure	0.86 µPa @ 20°C (Metamitron)
pH	6.5 – 8.5 (1% soln.)	Octanol/water partition coefficient	log = 0.85 @ 21°C (Metamitron)

Section 10: Stability and Reactivity

Stability of substance:

Thermal decomposition at 170°C (Metamitron).

Materials to avoid:

Oxidising agents, acids and alkalis.

Hazardous decomposition products:

Carbon monoxide, hydrogen cyanide, nitrogen oxides.

Hazardous polymerization:

Not known to occur.

Section 11: Toxicological Information

Chronic health effects:	Acute toxicity Inhalation: LC50 = 0.206 mg/L (mouse/hamster). Acute toxicity Oral: LD50 = 650 mg/kg (dog). Acute toxicity Dermal: LD50 = 1000 mg/kg (rat).
	See Section 2 for general hazard information.

Section 12: Ecological Information

Potential environmental interactions:	Very toxic to aquatic life with long lasting effects. Very toxic to soil environment. Harmful to terrestrial vertebrates.
Data organisation:	Toxicity to Algae: ErC50 = 0.22mg/L. Soil DT 50 > 30 days: ND. Toxicity to terrestrial vertebrates: LD50 = 650 mg/kg (mouse). Not readily degradable.

Section 13: Disposal Considerations

Product disposal:	Dispose of in accordance with label, or at an approved landfill.
Container disposal:	Triple rinse container and add residue to spray tank. Burn if circumstances, especially wind direction permit, otherwise flatten and bury in a suitable landfill. Avoid contamination of any water supply with chemical or empty container.

Section 14: Transport Information

(Any regulatory information on transport shall be included. Consult NZS 5433:1999. Reference to international transport requirements may be necessary.)

UN number:	3077
DG Class and Subsidiary Group	9
Proper Shipping Name	Environmentally hazardous substance, Solid, N.O.S. (Metamitron)
Packing group	III
HAZCHEM Code	2Z
Marine Pollutant	Yes
Special precautions	Maximum 0.5kg permitted to be carried on a Passenger Service Vehicle

Section 15: Regulatory Information

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.
HSNO Controls:	Trigger quantities for this substance:
Approved Handler Test Certificate:	Yes
Tracking:	Yes
SDS must be available for:	Any quantity
Signage:	100kg
Emergency plan:	100kg
Bunding:	100kg

Section 16: Other Information

Revision due: 24 July 2020
First Issue

Additional information: Directions for use are found on the product label.

Glossary:

ACVM	Agricultural Compounds and Veterinary Medicines (in relation to Group or Act 1997)
CAS	Chemical Abstract Services Number, used to uniquely identify chemical compounds
EEL	Environmental Exposure Limit
EPA	Environmental Protection Authority
LC50	Lethal Concentration fatal to 50% of test animals/organisms
LD50	Lethal Dose fatal to 50% of test animals/organisms
HSNO	Hazardous Substances and New Organisms (legislation 1996)
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.