



SAFETY DATA SHEET

MetiGro™

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Identifiers

Product name: **MetiGro™**
Other Name(s): Water dispersible granule containing 700 g/kg metiram

1.2 Recommended use of the chemical and restrictions on use

Product Use: Fungicide

1.3 Supplier contact details:

Company name: Grosafe Chemicals Limited
Address: 20 Jean Batten Drive Mt Maunganui, 3116
Telephone: 0800 220 002
Email: info@grosafe.co.nz

Emergency telephone number 0800 CHEMCALL (0800 243 622)

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the Hazardous Chemical

Hazardous substance according to Hazardous Substances and New Organisms (HSNO) Act 1996
Classifications: 6.1E (oral), 6.3B, 6.4A, 6.5A, 6.5B, 6.9B, 9.1A, 9.3C

2.2 Label elements:

Pictograms:



Signal Word: DANGER

Hazard statements:

H303	May be harmful if swallowed
H316	Causes mild skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H433	Harmful to terrestrial vertebrates.

Precautionary statements:*Prevention*

P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe dust/mist/spray.
P264	Wash hands and exposed skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.
P285	In case of inadequate ventilation wear respiratory protection (cartridge fitted with filter for particulates)

Response

P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTRE or doctor if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs: Get medical advice.
P363	Wash contaminated clothing before use.
P304 + P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTRE or doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice.
P391	Collect spillage.

Storage

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Disposal

P501	Dispose of contents/container in accordance with local regulations.
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion % w/w
Metiram	9006-42-2	70
Other ingredients*	Trade secret	balance

This is a commercial product whose exact ratio of components may vary slightly.

*Do not affect the hazardous classifications of the product.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures****General Information:**

For advice call the National Poison Centre, telephone 0800 POISON [0800 764 766] for advice.
Have label or Safety Data Sheet at hand

Ingestion: If swallowed, rinse mouth with water. Call the NATIONAL POISONS CENTRE or doctor for advice if person feels unwell.

Skin Contact: Remove contaminated clothing and wash skin with plenty of soap and water. Get medical advice if irritation or rash occurs.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice.

Inhalation: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call the NATIONAL POISONS CENTRE or doctor for advice if person feels unwell or is experiencing respiratory symptoms..

4.2 Symptoms caused by exposure

Unlikely to cause harmful effects under normal conditions of handling and use.

4.3 Medical attention and special treatment

Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

Use water spray or fog, foam, CO2 or dry chemical as appropriate for surrounding materials, Contain extinguishing media to prevent runoff into drains, sewers, waterways.

5.2 Specific hazards arising from the chemical

Fire decomposition products (e.g. carbon monoxide, carbon dioxide, nitrogen oxides, other unspecified compounds, smoke) may be harmful and/or irritating if inhaled.

Evacuate people to safe area upwind of fire.

5.3 Special protective equipment and precautions for fire fighters

Wear full personal protective equipment including with self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Have this SDS available. In the event of a spill, wear appropriate protective clothing, eye and skin protection. Wash contaminated personal protective equipment and clothing, and dry before re-use.

6.2 Environmental precautions

Prevent spillage from entering drains or waterways. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

6.3 Methods and materials for containment and cleaning up

Contain spilled material. Sweep up granules for reuse if possible or disposal. For small liquid spills, use absorbent material and recover into labelled drums that can be sealed for safe disposal. For large spills, recover liquid into labelled containers then absorb remaining liquid and transfer to drums for disposal. Clean area with water and detergent.

Dispose of contaminated materials to approved landfill in accordance with local regulations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Read the label before use. Do not handle until all safety precautions have been read and understood. To be used by people who are suitably trained and appropriately supervised. Do not apply into or onto water.

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Avoid contact with skin and eyes. Avoid inhalation of dust/mist/aerosols. Wear protective equipment such as coat/trouser (overalls), head protection, boots, gloves and eye protection.

Wash hands and exposed skin with soap and water after handling and before rest or meal breaks.

Do not use spray equipment contaminated with this product for any other purpose unless first thoroughly cleaned with a suitable cleaning detergent.

7.2 Conditions for safe storage

Store locked up in the closed original packaging out of reach of children and in a dry, cool, well-ventilated area and out of direct sunlight. Keep away from food, drink and animal feedstuffs. Storage of 100 kg or more of this product requires an emergency response plan, secondary containment and signage.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters – exposure standards, biological monitoring

Ingredient	TWA (mg/m ³)	STEL (mg/m ³)
Particulates, not otherwise classified	10 3 (respirable)	

No biological limits applicable.

8.2 Engineering controls

Use in well-ventilated area or outdoors.

8.3 Personal protective equipment (PPE)

The following Standards provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Eye/Face Protection: Wear chemical goggles.

Skin Protection: Wear impervious chemical resistant gloves (e.g. nitrile, butyl), coveralls, socks and chemical resistant footwear. For overhead spray exposure, wear chemical resistant headgear. Ensure all skin areas are covered.

Respirator: Use outdoors in well-ventilated area or use local exhaust ventilation. Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a cartridge, suitable for particulates.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Beige-brown granule
Odour	Slight
Odour threshold	Not known
pH	4.5 – 7.5 range
Melting/Freezing Point	No data available
Boiling Point /Range	No data available
Flash point	Non flammable
Flammability (solid, gas)	Not applicable
Vapour Pressure	No data available
Vapour density	No data available
Specific gravity	No data available
Solubility	Dispersible in water
Partition Co-efficient n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

This product is unlikely to react or decompose under normal storage conditions.

10.2 Chemical stability

Stable under normal temperatures and pressure for storage and use.

10.3 Conditions to Avoid

Avoid storage in direct sunlight.

10.4 Incompatible materials and possible hazardous reactions

None identified.

10.5 Hazardous decomposition products

Fire Decomposition: Carbon dioxide, carbon monoxide, nitrogen oxides, smoke and possible other unspecified compounds.

10.6 Polymerisation

Not known to occur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Health hazard information

The product is classified for health hazards according to an assessment of information on product.

11.2 Toxicological information

Acute toxicity:	May be harmful if swallowed.
Aspiration hazard:	Product contains no components with aspiration hazard.
Respiratory irritation:	Not classified as an irritant.
Skin corrosion/irritation	Mild irritant.
Serious eye damage/irritation	May cause serious irritation to eyes.
Respiratory or skin sensitisation	Metiram identified as both a respiratory and skin sensitizer.
Germ cell mutagenicity:	No ingredients in product identified as presumed or suspected mutagens.
Carcinogenicity	No ingredient identified as suspected of causing cancer.
Reproductive toxicity	No ingredients in product identified as suspected of damaging fertility or the unborn child.
Specific target organ toxicity – single/repeated exposure	Metiram identified as suspected target organ or system toxicants.
Narcotic effects	Product contains no ingredient identified as causing narcotic effects.

11.3 Toxicological data: Not available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This product is classified as being very toxic to aquatic life with long lasting effects and as harmful to terrestrial vertebrates.

12.2 Environmental Fate

Breakdown in soil and groundwater: Rapidly biodegradable.

Bioaccumulation: Low

Partition coefficient (octanol/water): Not available

Soil mobility: Low

12.3 Ecotoxicity data:

Metiram

Algae: *Pseudokirchmeriella subcapitata* EC₅₀ (72 h) growth
0.191 mg/L

Fish: Rainbow trout LC₅₀ (96 h) 0.336 mg/L

Crustacea: *Daphnia magna* LC₅₀ 0.584 mg/L

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product Disposal

Refer to product label. If possible, dispose of by using according to the label. Otherwise dispose of to an approved landfill in accordance with local regulations.

13.2 Container Disposal

Refer to product label. Do not use packaging for storage of other products. Empty packaging should be disposed of to an approved recycler or crushed and sent to approved landfill.

SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport:

Classified as Dangerous Good Class 9 according to NZS5433 Transport of Dangerous Goods on Land

Marine Transport (IMO/IMDG):

Classified as Dangerous Good Class 9 by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Classified as Dangerous Good Class 9 by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

UN Number:	3077
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS 70% METIRAM)
Transport hazard class(es)	9
Packing Group:	III
HAZCHEM:	2Z
Special Precautions for User:	-
IMDG Marine pollutant:	YES
Transport in Bulk:	-

SECTION 15: REGULATORY INFORMATION

15.1 HSNO Act 1996

Hazardous substance according to Hazardous Substances (Classification) Notice 2017.

Approved substance number: HSR000482

Water dispersible granule containing 700 g/kg metiram

Hazardous classifications: 6.1E, 6.3B, 6.4A, 6.5A, 6.5B, 6.9B, 9.1A, 9.3C

Controls: 77A Do not apply onto or into water

Additional information: Refer to HS Notices (www.epa.govt.nz) and HSW HS Regulations (www.worksafe.govt.nz)

15.2 ACVM Act 1997

Registration number: P9737

Refer to www.foodsafety.govt.nz for registration conditions.

SECTION 16: OTHER INFORMATION

16.1 Date of preparation or last revision of SDS

SDS issued	26 March 2020
SDS supersedes	Not applicable
Reason issued	New tradename product

16.2 ABBREVIATIONS

ADI	Acceptable Daily Intakes
CAS number	Chemical Abstracts Service Registry Number
CCID	Chemical Classification Identification Database
EPA	Environmental Protection Authority
ErC₅₀	Half maximal Effective Concentration
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSNO	Hazardous Substances and New Organisms
HS	Health and Safety
HSR	Hazardous Substances Register
IARC	International Agency for Research on Cancer
LC₅₀	Median Lethal Concentration
LD₅₀	Median Lethal Dose
SDS	Safety Data Sheets
NOAEL	No Observable Adverse Effect Level
NOEL	No Observable Effect Level
NOS	Not otherwise specified
STEL	Short Term Exposure Limit
SWA	Safety Work Australia
TWA	Time-Weighted Average
UN Number	United Nations Number

16.3 REFERENCES

EPA CCID and Approved Substance databases

16.4 OTHER

METIGRO™ is a trademark of Grosafe Chemicals Ltd

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End of Safety Data Sheet