



## SAFETY DATA SHEET

### SURETHIN®

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

##### 1.1 Identifiers

Product name: **SURETHIN®**  
Other Name(s): Water dispersible granule containing metamitron 700 g/kg

##### 1.2 Recommended use of the chemical and restrictions on use

Product Use: Plant growth regulator

##### 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](mailto: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

**HSNO Substance Approval:** HSR101023

**Classifications:** Acute oral toxicity Category 4, Acute dermal toxicity Category 4, Acute inhalation toxicity Category 4, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1.

##### 2.2 Label elements:

**Pictograms:**



**Signal Word:** **WARNING**

**Hazard statements:**

H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H316 Causes mild skin irritation.  
H332 Harmful if inhaled.  
H410 Very toxic to aquatic life with long lasting effects.  
H421 Very toxic to the soil environment.

H433 Harmful to terrestrial vertebrates.

**Additional labelling statements required under Hazardous Substances (Labelling) Notice 2017**

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

Do not apply directly into or onto water.

**Precautionary statements:**

*Prevention*

- P102 Keep out of reach of children.
- P103 Read label before use.
- P261 Avoid breathing mist/spray.
- P264 Wash hands 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 gloves/clothing.

*Response*

- P101 If medical advice is needed, have product container or label at hand.
- P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
- P330 Rinse mouth.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P312 Call a POISON CENTRE or doctor/physician if you feel unwell.
- P304 + P340 IF INHALED: Remove 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.
- P332 + P313 If skin irritation occurs: Get medical advice/attention.
- P363 Wash contaminated clothing before re-use.
- P391 Collect spillage.

*Storage*

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*Disposal*

- P501 Dispose of contents/container in accordance with local regulations.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredients	CAS	Proportion % w/w
Metamitron	41394-05-2	70
Other ingredients	Trade secret	balance

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

**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]. 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 you feel unwell. Have product label or SDS at hand.

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

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

**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 you feel unwell.

#### **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, CO<sub>2</sub> 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 (carbon oxides, nitrogen oxides, hydrogen cyanide) may be toxic/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 hand 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. Recover granules into container for reuse or disposal. For small liquid spills, use absorbent material such as sand, soil, vermiculite and recover into labelled drums that can be sealed for safe disposal. For large liquid 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 apply directly 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.

When applied product avoid inhalation of spray mist/aerosols. Wear protective equipment such as coat/trouser (overalls), boots, gloves and eye protection.

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

Do not eat, drink or smoke when using.

Use only outdoors or in well-ventilated area.

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 securely 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 sources of heat, 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 <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
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### 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 splash goggles if eye contact is possible.

**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/agricultural chemicals..

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White/off-white granule
Odour	Non specific
Odour threshold	Not known
pH	4.0 – 8.0 (10% aqueous dispersion)
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/bulk density	0.75 g/cc
Solubility	Disperses 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 or exposure to heat.

### 10.4 Incompatible materials and possible hazardous reactions

No information available.

### 10.5 Hazardous decomposition products

**Fire Decomposition:** Smoke, carbon and nitrogen oxides, hydrogen cyanide and 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:	Classified as harmful if ingested or in contact with skin or inhaled.
Aspiration hazard:	Product contains no components with aspiration hazard.
Respiratory irritation:	May be slightly irritating.
Skin corrosion/irritation	Classified as a mild skin irritant.
Serious eye damage/irritation	Not classified as an eye irritant.
Respiratory or skin sensitisation	Not classified as respiratory or contact sensitiser.
Germ cell mutagenicity:	No ingredients in product identified as presumed or suspected mutagens.
Carcinogenicity	No ingredients in product identified as presumed or suspected carcinogens.
Reproductive toxicity	No ingredients in product identified suspected of damaging fertility or the unborn child.
Specific target organ toxicity – single/repeated exposure	No classified for adverse effects to organs or systems.
Narcotic effects	Product contains no ingredient identified as causing narcotic effects.

### 11.3 Toxicological data:

Metamitron	Oral, LD <sub>50</sub> (dog) 650 mg/kg bw Dermal, LD <sub>50</sub> (rat) 1000 mg/kg bw Inhalation, LC <sub>50</sub> (mouse, hamster) 0.206 mg/L
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## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

This product is classified as very toxic to aquatic life with long lasting effects, very toxic to the soil environment and harmful to terrestrial vertebrates.

### 12.2 Environmental Fate

**Breakdown in soil and groundwater:** DT<sub>50</sub> reported as 22.2 to 44.5 days.

**Bioaccumulation:** Low bioaccumulation potential.

**Partition coefficient (octanol/water):** Log P 0.85 (25 °C, pH 7.0)

**Soil mobility:** Product disperses in water.

### 12.3 Ecotoxicity data:

Metamitron

Fish: Rainbow trout LC<sub>50</sub> (96 hr) >190 mg/L

Crustacea: *Daphnia magna* EC<sub>50</sub> (48 h) 5.7 mg/L

Alga: *Scenedesmus subcapitata* EC<sub>50</sub> (72 hr) 0.22 mg/L

Earthworm: *Eisenia foetida* LC<sub>50</sub> (14 d) 914 mg/kg soil

Bird: *Coturnix japonica* LD<sub>50</sub> 1302 mg/kg bw

## 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.

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

## SECTION 15: REGULATORY INFORMATION

### 15.1 HSNO Act 1996

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

**Approved substance number:** HSR101023

**Hazardous classifications:** Acute oral toxicity Category 4, Acute dermal toxicity Category 4, Acute inhalation toxicity Category 4, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to

- Controls:**
- the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1.
- Refer to control on [www.epa.govt.nz](http://www.epa.govt.nz) for complete wording for variation Controls.
- 77A Do not apply onto or into water.
- 77A To be applied by ground-based methods only.
- 77A Apply a maximum 740 g product/ha (518 g active/ha) per application, with a maximum application frequency of twice per year with a minimum interval period of 5 days between applications.
- 77A The person in charge of the application of the product and anyone applying the product must ensure the product is not applied within 15 m of downwind target plants.

**Additional information:**

Safety Data Sheet:	Any quantity
Restricted to workplace only:	No
Quantity that requires management in accordance with HSW HS Regulations:	1000 kg
Quantity for secondary containment and emergency response plan:	100 kg
Quantity for signage:	100 kg
Record of use if more than 3 kg applied to area within 24 hour period	Yes
Qualified handler required	Yes

Refer to HS Notices ([www.epa.govt.nz](http://www.epa.govt.nz)) and HSW HS Regulations ([www.worksafe.govt.nz](http://www.worksafe.govt.nz))

**15.2 ACVM Act 1997**

**Registration number:** P9503 Surethin®

Refer to [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions.

**SECTION 16: OTHER INFORMATION**

**16.1 Date of preparation or last revision of SDS**

<b>SDS issued</b>	9 <sup>th</sup> September 2021
<b>SDS supersedes</b>	SDS dated 23 <sup>rd</sup> December 2020
<b>Reason issued</b>	Change HSNO classifications to GHS format and correct UN number.

**16.2 ABBREVIATIONS**

<b>ADI</b>	Acceptable Daily Intakes
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>CCID</b>	Chemical Classification Identification Database
<b>EPA</b>	Environmental Protection Authority
<b>ErC<sub>50</sub></b>	Half maximal Effective Concentration
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>HSNO</b>	Hazardous Substances and New Organisms
<b>HS</b>	Health and Safety
<b>HSR</b>	Hazardous Substances Register
<b>IARC</b>	International Agency for Research on Cancer

<b>LC<sub>50</sub></b>	Median Lethal Concentration
<b>LD<sub>50</sub></b>	Median Lethal Dose
<b>SDS</b>	Safety Data Sheets
<b>NOAEL</b>	No Observable Adverse Effect Level
<b>NOEL</b>	No Observable Effect Level
<b>NOS</b>	Not otherwise specified
<b>STEL</b>	Short Term Exposure Limit
<b>SWA</b>	Safety Work Australia
<b>TWA</b>	Time-Weighted Average
<b>UN Number</b>	United Nations Number

### **16.3 REFERENCES**

EPA CCID and Approved Substance databases  
PPDB- Pesticides Properties DataBase

### **16.4 OTHER**

Surethin® is a trademark of Grosafe Chemicals Ltd

Information contained in this Safety Data Sheet is provided in good faith and is believed to be correct at the date hereof. However, it's expected that individuals receiving the information will exercise independent judgement in determining its appropriateness for a particular purpose. Grosafe Chemicals Ltd makes no representation whatsoever as to the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability whatsoever, whether with respect to negligence or otherwise, and no responsibility as permitted by law for any loss or damage arising from or connection with the supply or use of the information in this Safety Data Sheet.

End of Safety Data Sheet