

## SAFETY DATA SHEET

# HEXOGON PLUS<sup>®</sup>

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

#### 1.1 Identifiers

Product name: **HEXOGON PLUS<sup>®</sup>**  
 Other Name(s): Water dispersible granule containing 900 g/kg hexazinone

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

Product Use: Selective herbicide for the control of weeds in Radiata pine forests, established lucerne and non-crop situations.

#### 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

**Hazard Classifications:** Acute oral toxicity Category 4; Acute inhalation toxicity Category 4; Eye irritation Category 2; Specific target organ toxicity – repeated exposure Category 2; Hazardous to the aquatic environment acute Category 1; Hazardous to the aquatic environment chronic Category 1; Hazardous to soil organisms; Hazardous to terrestrial vertebrates

#### 2.2 Label elements:

##### Pictograms:



**Signal Word:** WARNING

##### Hazard statements:

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.



Hazardous to soil organisms.  
 Hazardous to terrestrial vertebrates.

**Precautionary statements:**

*Prevention*

- P260 Do not breathe mist/vapours/spray.
- P264 Wash hands and any exposed skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in well-ventilated area.
- P280 Wear protective gloves, protective clothing and eye/face protection.

*Response*

- P301 + P310 IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell
- P330 Rinse mouth.
- P304 + P340 IF INHALED: Remove to fresh air and keep comfortable for breathing.
- P312 Call a POISON CENTRE or doctor if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- 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/attention.
- 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
Hexazinone	51235-04-2	90 -92
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]. Have product container or at hand. Get medical advice/attention if you feel unwell.

**IF SWALLOWED:** Rinse mouth. Call a POISONS CENTRE or doctor if you feel unwell.

**IF ON SKIN:** Remove contaminated clothing and wash skin with plenty of soap and water. Get medical advice if irritation develops.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice.

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE or doctor 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. 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, other unspecified compounds, smoke) may be harmful and/or irritating if inhaled.

**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**

In the event of a spill, wear full protective clothing including respiratory, eye and face 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 into labelled drums that can be sealed for safe disposal. Clean area with water and detergent.

**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 workers who are trained and appropriately supervised. Use outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not inhale spray mist/aerosols. Wear protective equipment such as coat/trouser (overalls), boots, waterproof hat, respirator, gloves and eye protection. Wash hands and exposed skin after handling. 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 only in original container. Store securely in the closed original packaging out of reach of children and in a dry, cool, well-ventilated area. Keep away from food, drink and animals feeding stuffs.

**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> )
Particulates, not otherwise classified	10 or 3 (respirable)	

Exposure limits have not been established for any of the significant ingredients in this product. No biological limits applicable.



## 8.2 Engineering controls

Use only outdoors to ensure adequate ventilation.

## 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 or face shield when mixing or applying product.

**Skin Protection:** Wear impervious gloves (e.g. nitrile, butyl), coat, trousers, waterproof hat. Ensure all skin areas are covered.

**Respirator:** Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a type G cartridge, suitable for agricultural chemicals.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Off-white granule
Odour	Slight
Odour threshold	Not known
pH	6.0 – 9.0
Melting/Freezing Point	No data available
Boiling Point /Range	No data available
Flash point	Non flammable
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	No data available
Vapour Pressure	No data available
Vapour density	No data available
Specific gravity	No data available
Solubility	Completely 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
Particle characteristics	No data available

## 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

Incompatible with explosives, oxidising materials, strong acids and alkalis, organic peroxides.

### 10.5 Hazardous decomposition products

**Fire Decomposition:** Carbon dioxide, carbon monoxide, nitrous 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:	Harmful if swallowed or inhaled.
Aspiration hazard:	Product contains no components with aspiration hazard.
Respiratory irritation:	Not classified.
Skin corrosion/irritation	Not classified.
Serious eye damage/irritation	May cause serious eye irritation.
Respiratory or skin sensitisation	Not classified.
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 as suspected of damaging fertility or the unborn child.
Specific target organ toxicity – single/repeated exposure	Classified as potentially damaging to organs through prolonged or repeated exposure. Hexazinone affects the blood and hematopoietic system.
Narcotic effects	Product contains no ingredient identified as causing narcotic effects.

### 11.3 Toxicological data:

Hexazinone	Oral, guinea pig, LD <sub>50</sub> 860 mg/kg b.w Inhalation, rat, LC <sub>50</sub> 3.94 mg/L
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## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

This product is classified as being very toxic to aquatic life with long lasting effects, hazardous to soil organisms and hazardous to terrestrial vertebrates.

Hexazinone	Grass shrimp LC <sub>50</sub> (96hr) 78 mg/L <i>Selanestrum capricornutum</i> EC <sub>50</sub> 0.007 mg/L
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### 12.2 Environmental Fate

**Breakdown in soil and groundwater:** Not rapidly biodegradable (DT<sub>50</sub> >30 days).

**Bioaccumulation:** Not expected to occur.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Product Disposal

If possible, dispose of by using according to the label. Otherwise, dispose of to a chemical recovery service or in an approved landfill.

### 13.2 Container Disposal

Do not use packaging for storage of other products. Empty packaging should be crushed and disposed of to an 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 90% HEXAZINONE)
<b>Transport hazard class(es)</b>	9
<b>Packing Group:</b>	III
<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 2020.

**Approved substance number:** HSR000959

**Hazard classifications:** Acute oral toxicity Category 4; Acute inhalation toxicity Category 4; Eye irritation Category 2; Specific target organ toxicity – repeated exposure Category 2; Hazardous to the aquatic environment acute Category 1; Hazardous to the aquatic environment chronic Category 1; Hazardous to soil organisms; Hazardous to terrestrial vertebrates

**Controls:** 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))

Do not apply onto or into water.

**Certified handler:** Not applicable

**Tracking:** Not applicable

**Qualifications:** A person mixing, loading, or applying this substance must be a suitably qualified or under the guidance of a suitably qualified person.

**International Agreements:** Not applicable

**Signage trigger quantity (Schedule 3):** 100 kg

**Emergency Response Plan trigger quantity (Schedule 5):** 100 kg

**Secondary Containment trigger quantity (Schedule 16):** 100 kg

**Record Keeping:** A record of application may be required in certain circumstances. Refer to section 48 of Hazardous Substances (Hazardous Property Controls) Notice 2017



**Environmental exposure limits:** None set.

**Tolerable exposure limits:** None set

#### 15.2 ACVM Act 1997

**Registration number:** P9574

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

**SDS issued** 30 October 2023

**SDS supersedes** 12<sup>th</sup> August 2019

**Reason issued** Update to GHS

### 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

### 16.4 OTHER

HEXOGON PLUS® is a trademark of Grosafe Chemicals Ltd

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End of Safety Data Sheet