

SAFETY DATA SHEET

HEXOGON PLUS®

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Identifiers

Product name: **HEXOGON PLUS®**
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

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: 6.1D, 6.3B, 6.4A, 6.9B, 9.1A, 9.2A, 9.3C

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.
H319 Causes serious eye 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.

Precautionary statements:

Prevention

- P102 Keep out of reach of children.
 P261 Avoid breathing 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.
 P273 Avoid release to the environment.
 P280 Wear protective gloves, protective clothing and eye/face protection.

Response

- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
 P330 Rinse mouth.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P312 Call a POISON CENTRE or doctor if you feel unwell.
 P332 + P313 If skin irritation occurs: Get medical attention.
 P363 Wash contaminated clothing before re-use.
 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 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 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] for advice.
 Have label or Safety Data Sheet at hand

Ingestion: If swallowed, rinse mouth with water. Immediately 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 person feels unwell or irritation develops.

Eye Contact: 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.

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.

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 in outdoors in well-ventilated environment. Avoid contact with skin and eyes. Avoid inhalation of 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 ³)	STEL (mg/m ³)
Particulates, not otherwise classified	10 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
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

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

Contact with oxidising materials, strong acids and alkalis.

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, by dermal or inhalation exposure.
Aspiration hazard:	Product contains no components with aspiration hazard.
Respiratory irritation:	May irritate mucous membranes.
Skin corrosion/irritation	Mild irritant.
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	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 ₅₀ 860 mg/kg b.w Inhalation, rat, LC ₅₀ 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 , very toxic in the soil environment and harmful to terrestrial vertebrates.

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

Breakdown in soil and groundwater: Not rapidly biodegradable (DT₅₀ >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 in an approved landfill or bury below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

13.2 Container Disposal

Do not use packaging for storage of other products. Empty packaging should be 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.

UN Number:	3077
UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS 90% HEXAZINONE)
Transport hazard class(es)	9
Packing Group:	III
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: HSR000959
Viper 90DF

Hazardous classifications: 6.1D, 6.3B, 6.4A, 6.9B, 9.1A, 9.2A, 9.3C.

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

15.2 ACVM Act 1997

Registration number: P9574
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	12 th August , 2019
SDS supersedes	-
Reason issued	New SDS template

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

HEXOGON PLUS[®] is a trademark of Grosafe Chemicals Ltd

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End of Safety Data Sheet