

SAFETY DATA SHEET BACTUR™

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Identifiers

Product name: BACTUR™

Other Name(s): Water dispersible granule containing 32000 IU/mg

Bacillus thuringiensis subspecies kurstaki (serotype 3A,

3b, strain HD 263) for biocidal action against lepidopterous larvae (moths, butterflies).

1.2 Recommended use of the chemical and restrictions on use

Product Use: Biological insecticide

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 HSNO Substance Approval: HSR000711

Classifications: Eye irritation, Category 2, Designed for biological action.

2.2 Label elements:

Pictograms:



Signal Word: WARNING

Hazard statements:

H316 Causes mild skin irritation.
 H319 Causes serious eye irritation.
 H402 Harmful to aquatic life.

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



P103 Read label before use.

P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye or face protection.

Response

P332 + P313 If skin irritation occurs: Get medical advice.

P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

+ P338 lenses, if present. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice.

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
Bacillus thuringiensis subspecies kurstaki (serotype 3A, 3b, strain HD 263)	68038-71-1	64 – 65*
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 person feels unwell.

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

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 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.

^{*}Contains 32,000 international units (IU)/mg

^{**}Do not affect the hazardous classifications of the product.



SECTION 5: FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

Use water spray or fog and foam. Contain extinguishing media to prevent runoff into drains, sewers, waterways.

5.2 Specific hazards arising from the chemical

Fire decomposition products 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 reuse.

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 and collect into labelled container that can be sealed. Reuse if possible or dispose of safely. For small liquid spills, use absorbent material 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 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. Wear personal 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 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.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters – exposure standards, biological monitoring

Ingredient	TWA (mg/m³)	STEL (mg/m³)
Particulates	10 3 (respirable only)	



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 glasses with side shields or chemical splash goggles if eye contact is possible.

Skin Protection: Wear impervious gloves and overalls. For overhead spray exposure, wear chemical resistant headgear.

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 White to grey granule

Odour Slight
Odour threshold Not known

pH 5.0 – 7.0 (as 1% aqueous suspension)

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 0.70 - 0.75 g/ccSolubility 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 or exposure to heat.

10.4 Incompatible materials and possible hazardous reactions

None identified.

10.5 Hazardous decomposition products

Fire Decomposition: Carbon dioxide, carbon monoxide, smoke 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: Product is not classified.

Aspiration hazard: Product contains no components with aspiration hazard.

Respiratory irritation: Dust may be slightly irritating to throat.

Skin corrosion/irritation Mild skin irritant.

Serious eye damage/irritation Skin irritant.

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 Product is not classified. Specific target organ toxicity Product is not classified.

single/repeated exposure

Narcotic effects Product contains no ingredient identified as causing

narcotic effects.

11.3 Toxicological data:

Product Oral, rat LD₅₀ >5050 mg/kg b.w

Dermal, rat $LD_{50} > 2020$ mg/kg b.w.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This product is classified as harmful to aquatic life. *Bacillus thuringiensis* subspecies *kurstaki* (serotype 3A, 3b, strain HD 263) has biocidal action specific against lepidopterous larvae (moths, butterflies).

12.2 Environmental Fate

Breakdown in soil and groundwater: Information not available.

Bioaccumulation: Information not available.

Partition coefficient (octanol/water): Not available.

Soil mobility: Information not available.

12.3 Ecotoxicity data: Information not available.

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 INFORMAITON

Road and Rail Transport:

Not classified as Dangerous Good according to NZS5433 Transport of Dangerous Goods on Land Marine Transport (IMO/IMDG):

Not classified as Dangerous Good by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Not classified as Dangerous Good by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

UN Number: Non regulated

UN Proper Shipping Name: Transport hazard class(es)

Packing Group: HAZCHEM:

Special Precautions for User:

IMDG Marine pollutant:

Transport in Bulk:

SECTION 15: REGULATORY INFORMATION

15.1 HSNO Act 1996

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

Approved substance number: HSR000711

Hazardous classifications: Eye irritation, Category 2, Designed for biological action.

Controls: Refer to control on www.epa.govt.nz for complete wording for

variation Controls.

77A Do not apply onto or into water.

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

Regulations (<u>www.worksafe.govt.nz</u>)

15.2 ACVM Act 1997

Registration number: P5017 BACTUR™

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 28th November 2024 SDS supersedes 29th June 2020

Reason issued Review of product information and update SDS template

16.2 ABREVIATIONS

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



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 PPDB- Pesticides Properties DataBase

16.4 OTHER

BACTUR™ is a trademark of Grosafe Chemicals Ltd

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End of Safety Data Sheet