



COLIN CAMPBELL (CHEMICALS) PTY. LTD.

MATERIAL SAFETY DATA SHEET

Date of Issue: 1 February 2008

1) IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **CAMPBELL BACCHUS WG BIOLOGICAL INSECTICIDE**

Other Names: None

Chemical Group: Bacillus thuringiensis (50%)

Recommended Use: Insecticide for use on horticultural crops.

Supplier Details: Colin Campbell (Chemicals) Pty Ltd ABN 29 000 045 590
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Contact: Product Development Manager – (02) 9725 2544

Emergency Telephone Number: (02) 9725 2544 – 8am to 6pm Monday to Friday.

2) HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE - NON DANGEROUS GOOD

Hazardous classification: Hazardous according to the criteria of the National Occupational Health & Safety Commission (NOHSC)

Risk phrases: R37 - Irritating to respiratory system.
R43 - May cause sensitisation by skin contact.

Safety phrases: See sections 4,5,6,7,8,10,12,13

ADG Classification: Not a Dangerous good for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

SUSDP classification: Not scheduled (Standard for the Uniform Scheduling of Drugs & Poisons)

3) COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration
Bacillus thuringiensis	68038-71-1	50%
Inert ingredients	Non hazardous	50%

4) FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poison Information Centre (Ph: 13 11 26) and follow the advice given. Show this Material Safety Data Sheet to the doctor.

Inhalation: If inhaled remove to fresh air and keep at rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Skin Contact: Carefully remove contaminated clothing. Wash affected areas with soap and water.



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4) FIRST AID MEASURES continued

Eye contact:	Check and remove any contact lenses. Rinse eyes immediately with clean water for at least 15 minutes and seek medical aid.
Ingestion:	If victim is fully conscious, immediately give large quantities of water to drink and get medical help. Never give anything by mouth to an unconscious person.
First Aid facilities	Ensure eye wash and safety shower are available.
Medical Attention:	There is no specific antidote. Treat symptomatically.

5) FIRE FIGHTING MEASURES

Extinguishing media	Foam, dry chemical, carbon dioxide (CO ₂)
Hazard from combustion products	None known.
Precautions for fighting fires	Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away. If it can be done safely remove intact containers from the fire. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of extinguishing agent and spillage safely later.
Hazchem Code	Not applicable.

6) ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled material or contaminated surfaces. Do not smoke, eat or drink during the clean up process. Wear personal protective clothing and equipment as detailed in Section 8 PERSONAL PROTECTION. Keep people and animals away. Contain spill and absorb with earth, sand, clay or other absorbent material. Prevent spilled material from entering drains or watercourses. Collect and store in properly labelled drums for safe disposal. Clean floor with a damp cloth and place it in the drum. Seal drums and label ready for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc is unavoidable warn the local water authority.

7) HANDLING AND STORAGE

Handling	Keep out of reach of children. Will irritate eyes and skin. Avoid contact with eyes and skin. Do not inhale spray mist. After use and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves and contaminated clothing.
Storage	Store in the closed original container in a cool well ventilated area at <40°C. Do not store for prolonged periods in direct sunlight. Store in a locked room away from children, animals, food, animal feed, seed and fertilisers.
Flammability	Not flammable.



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8) EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Standards	No exposure standards have been assigned for <i>Bacillus thuringiensis</i> .	
Biological Limit Values	None allocated	
Engineering Controls	Use in a well ventilated area only.	
Personal Protective Equipment	Eyes:	Safety goggles or face shield
	Clothing:	Cotton overalls buttoned to the neck and wrists and a washable hat.
	Gloves:	Elbow length chemical resistant PVC gloves
	Respiratory:	Approved dust or pesticide respirator with a dust filter.

9) PHYSICAL AND CHEMICALS PROPERTIES

Appearance:	Light brown granules
Odour:	Characteristic of fish meal.
Vapour pressure:	Not applicable
Vapour density:	Not applicable
Boiling point:	Not applicable
Freezing/Melting point:	Not applicable
pH:	5-7 (1% solution in water at 25°C)
Solubility:	Disperses in water
Specific gravity:	0.41g/mL at 20°C
Flash point:	Not applicable
Flammability (explosive) limit:	Not applicable
Auto ignition temperature:	Not applicable
Partition coefficient (octanol/water):	Not applicable

10) STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	None known
Incompatible materials :	None known
Hazardous decomposition products:	None known
Hazardous reactions:	None. Hazardous polymerisation is not possible.



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11) TOXICOLOGICAL INFORMATION

Inhalation:	Inhalation of dust may result in respiratory irritation.
Skin contact:	May cause sensitisation by prolonged skin contact.
Eye contact:	May irritate the eyes.
Ingestion:	Product toxicity is low.

ANIMAL TOXICITY DATA – PRODUCT

Acute:	
Oral toxicity	LD ₅₀ rat >5050mg/kg (practically non-toxic)
Dermal toxicity:	LD ₅₀ rat > 2020mg/kg (slightly toxic)
Inhalation toxicity:	LC ₅₀ rat > 5.78mg/kg (practically non-toxic)
Skin irritation:	Slightly irritating.
Irritation of mucous membranes:	May cause irritation
Sensitisation:	No data

Chronic:

Chronic exposure not likely from normal use. No known medical conditions known to be aggravated with exposure. Not carcinogenic or mutagenic.

12) ECOLOGICAL INFORMATION

Ecotoxicity:	<u>Bacillus thuringiensis:</u> Fish toxicity: Low toxicity
Ecotoxicity (continued):	<i>Bird toxicity:</i> Acute oral LD ₅₀ >16 665 mg/kg (bobwhite quail) Acute oral LD ₅₀ >16 665 mg/kg (mallard duck) <i>Daphnia:</i> Life cycle NOEL = 1.6E +8 CFU/litre
Environmental fate, persistence and degradability, mobility	Not available.

12) DISPOSAL CONSIDERATIONS

Triple or preferable pressure rinse containers before disposal. Add rinsings to the mixing tank. Do not dispose of undiluted chemical on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.



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13) TRANSPORT INFORMATION

UN Number:	Not applicable
Proper Shipping name:	Not applicable
Class and subsidiary risk:	Not applicable
Packing Group:	Not applicable
EPG:	Not applicable
Hazchem code:	Not applicable

14) REGULATORY INFORMATION

Registered under the Agricultural and Veterinary Chemicals Act 1988 (Commonwealth) Australian Pesticides and Veterinary Medicines Authority approval number: 58991

15) OTHER INFORMATION

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact this company.

END OF MSDS