

VECTOBAC[®] G BIOLOGICAL INSECTICIDE**SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION**

Product Name: VectoBac G Biological Insecticide
Product Use: Biological Insecticide for control of mosquitoes
Company: Sumitomo Chemical Australia Pty Ltd
A.B.N. 21 081 096 255
Address: 242 Beecroft Road, Epping NSW 2121
Telephone Number: (02) 8752 9000 (Mon–Fri 8am–5pm EST)
Emergency Telephone Number: 1800 024 973 (24 hours) (EMERGENCIES ONLY)

SECTION 2: HAZARDS IDENTIFICATION

Approved Criteria Classification: Non-hazardous according to the criteria of the National Occupational Health and Safety Commission (NOHSC).
SUSDP Classification: Not Scheduled
ADG Classification: Not a Dangerous Good
Active Constituent: NOHSC exposure standards have not been assigned for the active ingredient in the formulation.

EMERGENCY OVERVIEW

Colour: Tan
Physical description: granule
Odour: Mild fermentation (malt) odour
Major health hazards: Product is non-toxic by ingestion, skin contact or inhalation. Direct contact with eyes or skin may cause mild irritation.

POTENTIAL HEALTH EFFECTS

Acute Toxicity: Product is non-toxic by ingestion, skin contact or inhalation. Direct contact with eyes and skin may cause mild irritation.

Signs and Symptoms of Systemic Effects: Direct contact with eyes may cause mild irritation. Inhalation of dust may result in respiratory tract irritation

Eye: Non Irritant
Skin: Non irritant
Ingestion: Not a likely route of exposure
Inhalation: Not a likely route of exposure

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity	CAS number	Proportion
<i>Bacillus thuringiensis</i> subsp <i>israelensis</i>	68038-71-1	<5%
Other ingredients determined not to be hazardous		to 100%

SECTION 4: FIRST AID MEASURES

- Scheduled Poisons:** Poison Information Centres in each State capital city can provide additional assistance for scheduled poisons. Telephone: 131126 (Australia).
- Eye contact:** Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
- Skin contact:** Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
- Ingestion:** Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
- Inhalation:** Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.
- Note to physician:** No known antidote, provide symptomatic/supportive care as necessary.

SECTION 5: FIRE FIGHTING MEASURES

- Fire and Explosion Hazards:** Not flammable.
- Extinguishing Media:** Use appropriate medium for the underlying cause of the fire.
- Hazardous Decomposition Products:** None
- Hazardous reactions:** None. Hazardous polymerisation will not occur.
- Materials to avoid:** None
- Fire Fighting:** Wear protective clothing and self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Telephone Number: 1800 024 973 (24 hours) (EMERGENCIES ONLY)

Observe precautions in Section 8: Personal Protection

Stop the source of the spill if it is safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water.

FOR SPILLS ON LAND

CONTAINMENT: Avoid runoff into storm sewers or other bodies of water.

CLEANUP: Recover product. Place into appropriate container for disposal. Avoid dust. Ventilate and wash the spill area. Pick up wash liquid with additional absorbent and place in a chemical waste container.

FOR SPILLS IN WATER

CONTAINMENT: Avoid runoff into storm sewers or other bodies of water. Isolate contaminated water.

CLEANUP: Remove contaminated water for treatment or disposal.

SECTION 7: HANDLING AND STORAGE

Keep out of reach of children. Keep pesticide in original container. Do not store near flame, sparks or hot surfaces. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put into food or drink containers. Store in a cool, dry place, out of direct sunlight.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

EYE PROTECTION:	Not usually required. Eye contact can be avoided by wearing protective eyewear.
RESPIRATION/VENTILATION:	Not usually required. If necessary use a respirator with a dust/mist filter. Use only in well ventilated areas.
SKIN PROTECTION:	Skin contact should be minimised by wearing protective clothing including impervious gloves. Wash thoroughly with soap and water after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Tan granular solid
ODOUR:	Mild fermentation (malt) odour
MELTING/FREEZING POINT:	Not
BOILING POINT:	NA
BULK DENSITY:	0.4 ± 0.06 g/mL
SOLUBILITY:	Suspends and partially soluble in water
VAPOUR PRESSURE:	NA
pH:	5.4 ± 1.0 (10% slurry)

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable. No oxidising or reducing properties.
INCOMPATIBILITY:	Alkalinity inactivates product.
HAZARDOUS DECOMPOSITION PRODUCTS:	None that are known. Hazardous polymerisation will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute (Product Specific)

Eye irritation:	N/D. VectoBac Technical Powder was mildly irritating in an eye irritation test in rabbits.
Oral LD ₅₀ (rat):	>5,000 mg/kg (rat)
Dermal LD ₅₀ (rabbits):	>5,000 mg/kg (rabbit)
Inhalation toxicity:	N/D. >2.84 mg/L (rat). No lethality was observed in rats after a 4 hour exposure at the highest obtainable inhalation exposure chamber concentration to VectoBac Technical Powder.
Irritation of the skin (rabbits):	N/D. Transient, slight or mild irritation noted in a dermal toxicity study with VectoBac Technical Powder.
Sensitisation:	N/D.

Chronic/Carcinogenicity

No adverse effects known. None of the components are classified as carcinogens.

Teratology (Birth Defects) Information

No adverse effects known

Reproduction Information

No adverse effects known

SECTION 12: ECOLOGICAL INFORMATION

Environmental Fate

Hydrolysis: Not available

Photolysis: Not available

Soil half life: Not available

Water solubility: Not available

Ecotoxicity

Avian Low Toxicity to fish and wildlife

Aquatic Low Toxicity to fish and wildlife

Other non-target organisms Low Toxicity to fish and wildlife.
VectoBac G is toxic only to the larvae of certain diptera. It does not harm other aquatic, marine or terrestrial fauna.

SECTION 13: DISPOSAL CONSIDERATIONS

Puncture, or shred and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm 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.

SECTION 14: TRANSPORT INFORMATION

Store in the closed, original container in a well-ventilated area, as cool as possible. Keep out of reach of children. Do not store in direct sunlight. This product is a biological larvicide containing crystals of protein and bacterial spores. Activity can be impaired unless product is protected from high temperature at all times. When transporting keep shaded. Avoid standing containers in direct sunlight in the field or on airstrips. Do not leave in car boot or other enclosed space on a sunny day. Do not store at 30°C or above.

ADG Code: Not a Dangerous Good

HAZCHEM Code: Not Applicable

SECTION 15: REGULATORY INFORMATION

This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA).

SECTION 16: OTHER INFORMATION

Abbreviations:

NA Not Applicable

NDA No Data Available

Revision date: September 2009

Revision number: 1

THE INFORMATION GIVEN IN THIS MSDS IS BASED ON DATA AVAILABLE TO US AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. CONTACT SUMITOMO CHEMICAL AUSTRALIA TO CONFIRM IF YOU HAVE THE MOST CURRENT MSDS.