

SECTION 1: Identification**1.1. GHS Product identifier**

Product name : VectoBac 12AS Biological Insecticide

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Insecticide
Restrictions on use : Not to be used for any purpose other than the one the product was designed for

1.4. Details of manufacturer or importer

Sumitomo Chemical Australia Pty Ltd.
Level 5
51 Rawson Street
Epping NSW 2121
Australia
T +61 (0)2 8752 9000
reception@sumitomo-chem.com.au - www.sumitomo-chem.com.au

1.5. Emergency phone number

Emergency number : MEDICAL EMERGENCY
Poisons Information Centre - Phone Australia 13 11 26, National Poison Center - Phone New Zealand 0800 764 766.

TRANSPORT EMERGENCY
Australia - 1800 033 111, New Zealand 0800 734 607

SECTION 2: Hazard identification**2.1. Classification of the hazardous chemical**

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Not classified

2.2. GHS Label elements, including precautionary statements

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	%
Bacillus thuringiensis subsp. israelensis strain AM65-52	68038-71-1	11.6
benzoic acid	65-85-0	<1
1,2-benzisothiazol-3(2H)-one	2634-33-5	<1
Other substances (not contributing to the classification of this product)	-	Up to 100%

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SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: If medical advice is needed, have product container or label at hand. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Call a poison center or a doctor if you feel unwell.
Self protection of the first-aider	: First-aiders should pay attention to their own protection and use the recommended personal protective equipment (see section 8).

4.2. Symptoms caused by exposure

Symptoms/effects	: None reasonably foreseeable.
Symptoms/effects after inhalation	: None under normal use. May cause respiratory irritation.
Symptoms/effects after skin contact	: None under normal conditions. Slight irritation.
Symptoms/effects after eye contact	: None under normal conditions. May cause slight irritation.
Symptoms/effects after ingestion	: None under normal conditions.

4.3. Medical attention and special treatment

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage. No action shall be taken without appropriate training or involving any personal risk.
Hazardous decomposition products in case of fire	: Thermal decomposition can lead to the release of irritating gases and vapours.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Exercise caution when fighting any chemical fire. Keep upwind.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage. No action shall be taken without appropriate training or involving any personal risk.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area.

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6.1.2. For emergency responders

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| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Evacuate unnecessary personnel. Stop leak if safe to do so. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

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| For containment | : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. |

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| Precautions for safe handling | : Ensure good ventilation of the work station. Wear personal protective equipment. |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

7.2. Conditions for safe storage, including any incompatibilities

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| Technical measures | : Keep in a cool, well-ventilated place away from heat. |
| Storage conditions | : Keep cool. Protect from sunlight. |
| Information on mixed storage | : Store away from incompatible materials and products. Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity. |
| Storage area | : Keep out of direct sunlight. |
| Special rules on packaging | : Position containers so that any labelling information is visible. Keep packaging closed when not in use. Check containers and packaging regularly for leaks and damage. |
| Packaging materials | : Always store product in container of same material as original container. |

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

No additional information available

8.2. Monitoring methods

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| Monitoring methods | : Workplace exposure - General requirements for the performance of procedures for the measurement of chemical agents. |
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8.3. Engineering controls

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| Appropriate engineering controls | : Ensure good ventilation of the work station. |
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8.4. Individual protection measures, such as personal protective equipment (PPE)

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| Personal protective equipment | : Personal protective equipment (PPE) must be suited to the nature of the work and any hazard associated with the work as identified by the risk assessment conducted. Avoid all unnecessary exposure. Wear recommended personal protective equipment. Avoid contact with eyes and skin. |
| Hand protection | : In case of repeated or prolonged contact wear gloves. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. |
| Other information | : The following Australian and New Zealand Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: AS/NZS 1715, Protective Gloves: AS 2161, Industrial Clothing: AS2919, Industrial Eye Protection: AS1336 and AS/NZS 1337, Occupational Protective Footwear: AS/NZS2210. PPE compliant with the recommended standards should be selected. |

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SECTION 9: Physical and chemical properties

Physical state	: Liquid
Appearance	: No data available
Colour	: light brown
Odour	: Characteristic
Odour threshold	: No data available
pH	: 5
pH solution concentration	: 1
Relative evaporation rate (butylacetate=1)	: No data available
Melting point / Freezing point	: Melting point: Not applicable
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Flammability	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Explosive properties	: No data available
Explosive limits	: No data available
Minimum ignition energy	: No data available
Fat solubility	: No data available

SECTION 10: Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).
Incompatible materials	: Strong acids. Strong bases. Strong oxidizers.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

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LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	> 5.34 mg/l

Skin corrosion/irritation	: Slightly irritating (Rabbit) pH: 5
Serious eye damage/irritation	: Slightly irritating (rabbit) pH: 5
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

benzoic acid (65-85-0)

STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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Aspiration hazard : Not classified

Bacillus thuringiensis subsp. israelensis strain AM65-52 (68038-71-1)

Viscosity, kinematic	Not applicable
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SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified.

Hazardous to the aquatic environment, long-term (chronic) : Not classified.

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LC50 - Fish [1]	> 370 mg/l Oncorhynchus mykiss (Rainbow trout)
EC50 - Crustacea [1]	> 50 mg/l Daphnia magna
LD50 dermal rabbit	> 5000 mg/kg
LD50 oral rat	> 5000 mg/kg

12.2. Persistence and degradability

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Persistence and degradability	Rapidly degradable
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

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Fluorinated greenhouse gases	False
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SECTION 13: Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Dispose of contents/container to a hazardous or special waste collection point. Disposal must be done according to official regulations.

Additional information : Do not re-use empty containers.

Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

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SECTION 14: Transport information

ADG	IMDG	IATA
14.1. UN number		
Not applicable	Not applicable	Not applicable
14.2. UN Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable

14.6. Special precautions for user

Specific storage requirement : No data available
Shock sensitivity : No data available

14.7. Additional information

Other information : No supplementary information available

Transport by road and rail

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

14.8. Hazchem or Emergency Action Code

Hazchem Code : Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations

Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS : All the chemicals contained in this product are listed introductions
Inventory) status

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Relevant Poisons Schedule number : Unscheduled

Australian Pesticides and Veterinary Medicines Authority (APVMA)

APVMA Approval number : 53433

15.2. International agreements

No additional information available

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SECTION 16: Other information

Data sources

: Safe Work Australia - Code of Practice - Preparation of Safety Data Sheets for Hazardous Chemicals
Safe Work Australia - Code of Practice - Labelling of Workplace Hazardous Chemicals
Safe Work Australia - Workplace Exposure Standards for Airborne Contaminants
Safe Work Australia - Hazardous Chemical Information System (HCIS)
Australian Inventory of Industrial Chemicals (AICIS Inventory)
Environmental Protection Authority - Hazardous Substances (Hazard Classification) Notice 2020
Environmental Protection Authority - Hazardous Substances (Safety Data Sheets) Notice 2017
Environmental Protection Authority - Hazardous Substances (Labelling) Notice 2017
New Zealand - Chemical Classification and Information Database (CCID)
New Zealand - Inventory of Chemicals (NZIoC)
European Chemicals Agency (ECHA) - Annex VI (C&L Inventory)
European Chemicals Agency (ECHA) - REACH Study Results
European Chemicals Agency (ECHA) - REACH Registration Dossiers
United Nations - Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Uniform Scheduling of Medicines and Poisons (SUSMP)
United Nations Recommendations on the Transport of Dangerous Goods (UNRTDG Model Regulation)
Australian Dangerous Goods Code (ADG Code)
International Air Transport Association Dangerous Goods Regulations (IATA DGR)
International Maritime Dangerous Goods (IMDG Code).

Safety Data Sheet (SDS), Australia

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.