SAFETY DATA SHEET

VectoBac 12AS Biological Insecticide

According to Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, February 2016

SECTION 1: Identification: Product identifier and chemical identity

Product identifier

Product name VectoBac 12AS Biological Insecticide

Relevant identified uses of the substance or mixture and uses advised against

Application Insecticide

Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier www.sumitomo-chem.com.au
Sumitomo Chemical Australia Pty Ltd
Level 5, 51 Rawson Street,
EPPING, NSW 2121
(02) 8752 9000
(02) 8752 9099
Reception@sumitomo-chem.com.au

Emergency telephone number

Emergency telephone 1800 024 973 (Australia) 0800 243 6225 (New Zealand)

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified
Health hazards Not Classified
Environmental hazards Not Classified

Label elements

Hazard statements Not Classified

Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition and information on ingredients

Substances

Other, non-hazardous ingredients 88.4%

Bacillus thuringiensis subsp. israelensis 11.6%
CAS number: 68038-71-1

Product name VectoBac 12AS Biological Insecticide
# VectoBac 12AS Biological Insecticide

## SECTION 4: First aid measures

### Description of first aid measures

**General information**
Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

**Inhalation**
No specific recommendations. If throat irritation or coughing persists, proceed as follows.
Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues.

**Ingestion**
No specific recommendations. If throat irritation or coughing persists, proceed as follows.
Rinse mouth. Get medical attention if any discomfort continues.

**Skin Contact**
No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.

**Eye contact**
Rinse with water. Get medical attention if any discomfort continues.

### Protection of first aiders
Use protective equipment appropriate for surrounding materials.

### Most important symptoms and effects, both acute and delayed

**General information**
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**
No specific symptoms known. Spray/mists may cause respiratory tract irritation.

**Ingestion**
May cause discomfort.

**Skin contact**
May cause slight irritation.

**Eye contact**
No specific symptoms known. May be slightly irritating to eyes.

### Indication of any immediate medical attention and special treatment needed

**Notes for the doctor**
Treat symptomatically.

**Specific treatments**
No special treatment required.

## SECTION 5: Firefighting measures

### Extinguishing media

**Suitable extinguishing media**
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

### Special hazards arising from the substance or mixture

**Specific hazards**
Containers can burst violently or explode when heated, due to excessive pressure build-up.

**Hazardous combustion products**
Thermal decomposition or combustion products may include the following substances:
Harmful gases or vapours.

### Advice for firefighters

**Protective actions during firefighting**
Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
VectoBac 12AS Biological Insecticide

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to Australia/New Zealand Standards AS/NZS 4967 (for clothing) AS/NZS 1801 (for helmets), AS/NZS 4821 (for protective boots), AS/NZS 1801 (for protective gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions
No specific recommendations. For personal protection, see Section 8. Avoid contact with skin and eyes.

Environmental precautions
Avoid discharge into drains or watercourses or onto the ground.

Methods and material for containment and cleaning up

Methods for cleaning up
Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

Reference to other sections

Reference to other sections
For personal protection, see Section 8.

SECTION 7: Handling and storage, including how the chemical may be safely used

Precautions for safe handling

Usage precautions
Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene
Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions
No specific recommendations.

Storage class
Unspecified storage.

Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls and personal protection

Control parameters

Occupational exposure limits
No value assigned for this specific material by Safe Work Australia

Exposure controls

Protective equipment

Appropriate engineering controls
No specific ventilation requirements.
VectoBac 12AS Biological Insecticide

**Eye/face protection**
No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

**Hand protection**
It is recommended that chemical-resistant, impervious gloves are worn. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with Australia/New Zealand Standard AS/NZS 2161. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

**Other skin and body protection**
Wear appropriate clothing to prevent repeated or prolonged skin contact.

**Hygiene measures**
Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

**Respiratory protection**
No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

**Environmental exposure controls**
Not regarded as dangerous for the environment.

### SECTION 9: Physical and chemical properties

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Light brown.</td>
</tr>
<tr>
<td>Odour</td>
<td>Malt-like</td>
</tr>
<tr>
<td>pH</td>
<td>5.0 (1% w/v)</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.06 @ 20°C</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

**Reactivity**
There are no known reactivity hazards associated with this product.

**Stability**
Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

**Possibility of hazardous reactions**
No potentially hazardous reactions known.

**Conditions to avoid**
There are no known conditions that are likely to result in a hazardous situation.

**Materials to avoid**
No specific material or group of materials is likely to react with the product to produce a hazardous situation.

**Hazardous decomposition products**
Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

### SECTION 11: Toxicological information

**Information on toxicological effects**

**Acute toxicity - oral**
**VectoBac 12AS Biological Insecticide**

<table>
<thead>
<tr>
<th><strong>Notes</strong> (oral LD₅₀)</th>
<th>&gt;5,000 mg/kg, Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute toxicity</strong> - dermal</td>
<td></td>
</tr>
<tr>
<td><strong>Notes</strong> (dermal LD₅₀)</td>
<td>&gt;5,000 mg/kg, Rabbit</td>
</tr>
<tr>
<td><strong>Acute toxicity</strong> - inhalation</td>
<td></td>
</tr>
<tr>
<td><strong>Notes</strong> (inhalation LC₅₀)</td>
<td>&gt;5.34 mg/l, (4 hr), Rabbit</td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Animal data</strong></td>
<td>Slightly irritating. (Rabbit)</td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td>Slightly irritating. (Rabbit)</td>
</tr>
<tr>
<td><strong>Respiratory sensitisation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Skin sensitisation</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Genotoxicity - in vitro</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>IARC carcinogenicity</strong></td>
<td>None of the ingredients are listed or exempt.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity - fertility</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity - development</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - single exposure</strong></td>
<td>Not classified as a specific target organ toxicant after a single exposure.</td>
</tr>
<tr>
<td><strong>STOT - single exposure</strong></td>
<td>Not classified as a specific target organ toxicant after repeated exposure.</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - repeated exposure</strong></td>
<td>Not classified as a specific target organ toxicant after repeated exposure.</td>
</tr>
<tr>
<td><strong>Aspiration hazard</strong></td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
</tbody>
</table>

**General information**
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation**
No specific symptoms known.

**Ingestion**
May cause discomfort if swallowed.

**Eye contact**
May be slightly irritating to eyes.

**Route of entry**
Ingestion Inhalation Skin and/or eye contact

**Target Organs**
No specific target organs known.

### SECTION 12: Ecological Information

**Ecotoxicity**
Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
VectoBac 12AS Biological Insecticide

Toxicity
Based on available data the classification criteria are not met.

Acute toxicity - fish
LC₅₀, 96 hour: >370 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates
LC₅₀, 48 hour: >50 mg/l, Daphnia magna

Acute toxicity - terrestrial
LC₅₀, : >3,077 mg/l, Colinus Virginianus (Bobwhite Quail)

Persistence and degradability
The degradability of the product is not known.

Bioaccumulative potential
No data available on bioaccumulation.

Mobility in soil
No data available.

Results of PBT and vPvB assessment

Other adverse effects
None known.

SECTION 13: Disposal considerations

Waste treatment methods
Disposal methods
Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.
If not recycling, break, crush, or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

SECTION 14: Transport information

General
Not a dangerous good according to ADG code 7

UN number
Not applicable.

UN proper shipping name
Not applicable.

Transport hazard class(es)

Packing group

Environmental hazards

Special precautions for user

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Inventories
Australia - AICS
Not applicable
## SECTION 16: Any other relevant information

<table>
<thead>
<tr>
<th>Training advice</th>
<th>Only trained personnel should use this material.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>16/11/2016</td>
</tr>
<tr>
<td>Revision</td>
<td>3</td>
</tr>
<tr>
<td>Supersedes date</td>
<td>16/11/2016</td>
</tr>
<tr>
<td>SDS No.</td>
<td>4708</td>
</tr>
</tbody>
</table>

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