Material Safety Data Sheet

NON-Hazardous Substance, NON-Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: Yates Nature’s Way Caterpillar Killer

Synonyms:
Yates Nature’s Way Caterpillar Killer

Recommended use: Bio-insecticide for the control of leaf-eating caterpillars on fruit trees, grape vines, cabbages, cauliflowers and broccoli.

Supplier: Yates, a division of DuluxGroup (Australia) Pty Ltd
ABN: 67 000 049 427
Street Address: 1956 Dandenong Road
          Clayton VIC 3168
          Australia
Telephone: 1300 369 074

Emergency telephone number: Australia – 1800 033 111
                                  New Zealand – 0800 734 607

2. HAZARDS IDENTIFICATION

Based on available information, this material is not classified as hazardous according to criteria of Safe Work Australia.

Poisons Schedule (Aust): Not applicable

DANGEROUS GOODS CLASSIFICATION

Not classified as Dangerous Goods by the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail” and the “New Zealand NZS5433: Transport of Dangerous Goods on Land”.

3. COMPOSITION INFORMATION

<table>
<thead>
<tr>
<th>CHEMICAL ENTITY</th>
<th>CAS NO.</th>
<th>PROPORTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>8640 International Units of potency per mg of Bacillus thuringiensis var. kurstaki</td>
<td>(CAS No.68038-71-1)</td>
<td>Balance</td>
</tr>
<tr>
<td>Ingredients determined to be non-hazardous</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).
Material Safety Data Sheet

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye contact: If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. If vomiting occurs give further water. Seek medical advice.

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Specific hazards: Non-combustible material.

Fire fighting further advice: On decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

Hazchem Code: Not applicable.

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS
Wear protective equipment to prevent skin and eye contamination. Wipe up with absorbent (clean rag or paper towels). Allow absorbent to dry before disposing with normal household garbage.

LARGE SPILLS
Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops or waterways has occurred advise emergency services or State Department of Agriculture.


7. HANDLING AND STORAGE

Handling: Avoid skin and eye contact and inhalation of dust.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by Safe Work Australia or Department of Labour New Zealand.

However for:

<table>
<thead>
<tr>
<th></th>
<th>TWA ppm</th>
<th>TWA mg/m3</th>
<th>STEL ppm</th>
<th>STEL mg/m3</th>
<th>CARCINOGEN CATEGORY</th>
<th>NOTICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspirable dust</td>
<td>-</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

As published by the Safe Work Australia or Department of Labour New Zealand.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the “National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)” the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

Personal protection equipment: OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.

MANUFACTURING, PACKAGING AND TRANSPORT:
Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

CONSUMER USE:
Wear gloves. Avoid inhaling dust. Wash hands after use.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Avoid skin and eye contact and inhalation of dust. Wash hands prior to eating, drinking or smoking. Ensure that eyewash stations and safety showers are close to the workstation location.
9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Fine, tan powder with a faint odour.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Bulk Density (20 °C)</td>
<td>0.5 kg/L</td>
</tr>
<tr>
<td>Relative Vapour Density (air=1)</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Vapour Pressure (20 °C)</td>
<td>N Av</td>
</tr>
<tr>
<td>Flash Point (°C)</td>
<td>N App</td>
</tr>
<tr>
<td>Flammability Limits (%)</td>
<td>N App</td>
</tr>
<tr>
<td>Autoignition Temperature (°C)</td>
<td>N App</td>
</tr>
<tr>
<td>Melting Point/Range (°C)</td>
<td>N Av</td>
</tr>
<tr>
<td>Boiling Point/Range (°C)</td>
<td>N Av</td>
</tr>
<tr>
<td>pH</td>
<td>N Av</td>
</tr>
<tr>
<td>Total VOC (g/Litre)</td>
<td>N App</td>
</tr>
</tbody>
</table>

(Typical values only - consult specification sheet)

N Av = Not available   N App = Not applicable

10. STABILITY AND REACTIVITY

Reactivity: No reactivity hazards are known for the material.

Chemical stability: This material is thermally stable when stored and used as directed.

Hazardous reactions: No known hazardous reactions.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents.

Hazardous decomposition products: Oxides of carbon, nitrogen and sulphur, smoke and other toxic fumes.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract.

Skin contact: Repeated or prolonged skin contact may lead to irritation.

Ingestion: No adverse effects expected however large amounts may cause nausea and vomiting.

Eye contact: Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

Long Term Effects: No information available for product.
Acute toxicity / Chronic toxicity:
No LD50 data available for the product.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Ecotoxicity: No information available

Persistence and degradability: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see “Section 8. Exposure Controls and Personal Protection” of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT
Not classified as Dangerous Goods by the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail” and the “New Zealand NZS5433: Transport of Dangerous Goods on Land”.

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

AIR TRANSPORT
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

- Montreal Protocol (Ozone depleting substances)
- The Stockholm Convention (Persistent Organic Pollutants)
- The Rotterdam Convention (Prior Informed Consent)
- Basel Convention (Hazardous Waste)
- International Convention for the Prevention of Pollution from Ships (MARPOL)

This material/constituent(s) is covered by the following requirements:

- The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth).
- All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).
- The Agricultural and Veterinary Chemicals Act (Commonwealth) and/or applicable Commonwealth, State or Territory control-of-use legislation.

16. OTHER INFORMATION

Literary reference

This Material Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd (chemdata.com.au) on behalf of its client.

Reason(s) For Issue: First Issue.

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since DuluxGroup (Australia) Pty Ltd and DuluxGroup (New Zealand) Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

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

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.