Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: VECTOBAC (R) 12AS
Index number: 73049-38

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

Use of substance / mixture: Fly/pest control.

1.3. Details of the supplier of the safety data sheet

Company name: Resource Chemical Ltd
Resource House
76 High Street
Brackley
Northants
NN13 7DS
Tel: +44(0)1280 843800
Fax: +44(0)1280 701745
Email: sales@resourcechemical.ltd.uk

1.4. Emergency telephone number

Emergency tel: +44(0)1270 502891

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: -: EUH208; -: EUH401

Most important adverse effects: Contains Bacillus thuringiensis. May produce an allergic reaction. To avoid risks to human health and the environment, comply with the instructions for use.

2.2. Label elements

Label elements:

Hazard statements: EUH208: Contains Bacillus thuringiensis. May produce an allergic reaction.
EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements: P261: Avoid breathing spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P363: Wash contaminated clothing before reuse.
P302+352: IF ON SKIN: Wash with plenty of water/.
P501: Dispose of contents/container to hazardous or special waste collection point.

[cont...]
2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: VECTOBAC (R) 12AS

Contains: Inert ingredients - identity withheld as a trade secret.

Bacillus thuringiensis var. israelensis 11.61% w/w.

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one’s own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: Exposure may cause coughing or wheezing.

Delayed / immediate effects: Delayed effects can be expected after long-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s): No special requirement.

Section 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>State</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>-</td>
<td>-</td>
<td>10mg/m3</td>
<td>4mg/m3</td>
</tr>
</tbody>
</table>

DNEL/PNEC Values

DNEL / PNEC: No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Respiratory protective device with particle filter. Particle filter class P3SL (EN143).

Hand protection: Nitrile gloves.

Eye protection: Safety goggles.

Skin protection: Impermeable protective clothing.

Environmental: Refer to specific Member State legislation for requirements under Community environmental legislation.
Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- **State:** Liquid
- **Colour:** Pale brown
- **Odour:** Characteristic odour
- **Evaporation rate:** No data available.
- **Oxidising:** Non-oxidising (by EC criteria)
- **Solubility in water:** Slightly soluble
- **Viscosity:** No data available.
- **Boiling point/range°C:** No data available.
- **Flammability limits %: lower:** Not applicable.
- **Flash point°C:** Not applicable.
- **Autoignition°C:** No data available.
- **Relative density:** 1.06
- **VOC g/l:** No data available.
- **Melting point/range°C:** No data available.
- **upper:** Not applicable.
- **Part.coef. n-octanol/water:** No data available.
- **Vapour pressure:** No data available.
- **pH:** 5

9.2. Other information

- **Other information:** No data available.

Section 10: Stability and reactivity

10.1. Reactivity

- **Reactivity:** Stable under recommended transport or storage conditions.

10.2. Chemical stability

- **Chemical stability:** Stable under normal conditions.

10.3. Possibility of hazardous reactions

- **Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.
  
  Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

- **Conditions to avoid:** Heat.

10.5. Incompatible materials

- **Materials to avoid:** Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

- **Haz. decomp. products:** In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

[cont...]
SAFETY DATA SHEET
VECTOBAC (R) 12AS

Toxicity values:

<table>
<thead>
<tr>
<th>Route</th>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
</tr>
<tr>
<td>SKN</td>
<td>RBT</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
</tr>
<tr>
<td>DUST/MIST</td>
<td>RAT</td>
<td>4H LC50</td>
<td>&gt;5.34</td>
<td>mg/l</td>
</tr>
</tbody>
</table>

Symptoms / routes of exposure

- **Skin contact:** There may be irritation and redness at the site of contact.
- **Eye contact:** There may be irritation and redness. The eyes may water profusely.
- **Ingestion:** There may be soreness and redness of the mouth and throat.
- **Inhalation:** Exposure may cause coughing or wheezing.

Delayed / immediate effects: Delayed effects can be expected after long-term exposure.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

<table>
<thead>
<tr>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAINBOW TROUT (Oncorhynchus mykiss)</td>
<td>96H LC50</td>
<td>&gt;370</td>
<td>mg/l</td>
</tr>
<tr>
<td>BLUEGILL (Lepomis macrochirus)</td>
<td>96H LC50</td>
<td>&gt;600</td>
<td>mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability: Not applicable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Not applicable.

12.4. Mobility in soil

Mobility: Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user’s attention is drawn to the possible existence of regional or national regulations regarding disposal.
Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Specific regulations: Not applicable.

15.2. Chemical Safety Assessment
Chemical safety assessment: A chemical safety assessment has been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.
This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

Phrases used in s.2 and s.3: EUH208: Contains <name of sensitising substance>. May produce an allergic reaction.
EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.