## Section 1 Identification of the mixture and of the company

### 1.1 Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Madex ®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>Madex 3</td>
</tr>
</tbody>
</table>

### 1.2 Relevant identified uses of the mixture and uses advised against

<table>
<thead>
<tr>
<th>Use of the product</th>
<th>Biological insecticide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses advised against</td>
<td></td>
</tr>
</tbody>
</table>

### 1.3 Details of the supplier of the Safety Data Sheet

<table>
<thead>
<tr>
<th>Manufacturer/Supplier</th>
<th>Andermatt Biocontrol AG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Stahlermatten 6</td>
</tr>
<tr>
<td></td>
<td>6146 Grossdietwil</td>
</tr>
<tr>
<td>Phone (technical)</td>
<td>+41 (0)62 917 5125</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:contact@biocontrol.ch">contact@biocontrol.ch</a></td>
</tr>
</tbody>
</table>

### 1.4 Emergency telephone number

| Phone (medical) | +41 (0)44 251 5151 (Swiss Toxicology Centre) |

## Section 2 Hazards identification

### 2.1 Classification of the mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

### 2.2 Label elements

- Store locked up.
- Keep out of the reach of children.
- Do not breathe vapours.
- Avoid contact with skin.
- To avoid risks to human health and the environment, comply with the instructions for use.
- Contains *Cydia pomonella* Granulovirus. May produce an allergic reaction (may cause sensitisation by inhalation and skin contact).

### 2.3 Other hazards

This mixture does not contain any substances, which are persistent, bioaccumulative and toxic (PBT).

This mixture does not contain any substances which are very persistent and very bioaccumulative (vPvB).

## Section 3 Composition/information on ingredients

### 3.1 Substances

This product is a mixture

### 3.2 Mixtures

*Cydia pomonella* granulovirus

No hazardous component according to Regulation (EC) No 1272/2008 [CLP]

## Section 4 First aid measures

### 4.1 Description of first aid measures

**General notes**

If medical advice is needed, have product container or label at hand.

Change any contaminated or wetted clothing at once.

If poisoning occurs contact a doctor or Swiss Toxicology Centre.

Only possible by exposure to HOT product. Move to fresh air, rest, half upright position, loosen clothing. Oxygen or artificial respiration if there is difficulty in breathing. Seek medical advice after significant exposure. Symptomatic treatment is advised.

Remove contaminated clothing. Seek medical advice if irritation develops. Launder clothes before reuse. After contact with skin,
Following eye contact  
wash immediately with plenty of water.
Rinse thoroughly with plenty of water. Eyelids should be hold away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.

Following ingestion  
Advice to physician  
No typical symptoms and affects known  
Symptomatic treatment

4.2 Most important symptoms and effects, both acute and delayed  
No typical symptoms and effects known.

4.3 Indication of any immediate medical attention and special treatment needed  
None

Section 5  
Firefighting measures

5.1 Extinguishing media  
Suitable extinguishing media  
Water mist, alcohol resistant foam, carbon dioxide, dry powder

Unsuitable extinguishing media  
Water-jet, foam

5.2 Special hazards arising from the mixture  
Vapours cause coughing  
At elevated temperatures (> 200°C), there is a risk of exothermic polymerization. At temperatures > 280°C, acrolein may be formed.

5.3 Advice for firefighters  
Avoid contact with oxidizing agents. Cool closed containers with water.

Section 6  
Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures  
Use protective clothing. Do not inhale.

6.2 Environmental precautions  
Prevent entry into drains, waters, sewages etc. of the product; contact immediately the municipal technical management if the product enters such bodies.

6.3 Methods and material for containment and cleaning up  
Use adsorbent material to collect spillage (e.g. sawdust, peat, chemical binder). Place contaminated adsorbent in closable containers. Use a damp cloth to clean floors and other objects after removal of contaminated adsorbent. Also place used cleaning materials into closable receptacles.

6.4 Reference to other sections  
See personal protective equipment under Section 8 of SDS.

Section 7  
Handling and storage

7.1 Precautions for safe handling  
The usual precautions for handling chemicals should be observed

7.2 Conditions for safe storage, including any incompatibilities  
Store in original package only. Stored in the refrigerator (< 5°C) for two years. Stored at -18°C for years without any loss of activity.

7.3 Specific end use(s)  
Biological Insecticide

Section 8  
Exposure controls/personal protection

8.1 Control parameters
The usual precautionary measures for handling chemicals should be observed.

### 8.2 Exposure controls

- **Eye/face protection**: No specific recommendations
- **Skin protection**: Use protective clothing
- **Respiratory protection**: No specific recommendations
- **Thermal hazards**: No specific recommendations
- **Other information**: None

### Section 9 Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

- **Physical state**: Liquid (20°C)
- **Colour**: Grey-brown
- **Odour**: Characteristic
- **Odour threshold**: Not determined
- **pH**: 6-7
- **Melting point/freezing point**: Not determined (is not freezing at -18°C)
- **Initial boiling point and boiling range**: 103 - 290°C
- **Flash point**: Not determinable up to 101°C
- **Evaporation rate**: Not determined
- **Flammability**: Not flammable
- **Upper/lower flammability or explosive limits**: Not flammable
- **Vapour pressure**: Not determined
- **Vapour density**: Not relevant
- **Relative density**: 1.16 (g/ml)
- **Solubility(ies)**: Soluble in water
- **Partition coefficient: n-cotanol/water**: Not determined
- **Auto-ignition temperature**: Not determined
- **Decomposition temperature**: >200°C
- **Viscosity**: 1200 mPa × s
- ** Explosive properties**: non explosive
- **Oxidising properties**: non oxidizing

#### 9.2 Other information

None

### Section 10 Stability and Reactivity

#### 10.1 Reactivity

Not reactive

#### 10.2 Chemical stability

No decomposition if stored and handled properly

#### 10.3 Possibility of hazardous reactions

Not relevant

#### 10.4 Conditions to avoid

Temperature >200°C (polymerization, decomposition)

#### 10.5 Incompatible materials

Avoid contact with oxidizing agents

#### 10.6 Hazardous decomposition products

Acrolein (>280°C)
Section 11  Toxicological information

11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Rat, oral, $5 \times 10^9$ granules /kg BW (AcNPV), no adverse effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Rabbit, contact, 0.5 mL/animal $(2.2 \times 10^{13}$ granula of CpGV/L) for 4 h, no adverse effect</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Rabbit, contact, 0.1 mL/eye $(2.2 \times 10^{13}$ granula of CpGV/L) for 4 h, non-irritating</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Guinea pig, inhalation, 35 mg CpGV $(7 \times 10^8$ granules) per m³ for 15 min, no adverse effects</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not determined</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>Not existing</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>Not existing</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not relevant</td>
</tr>
</tbody>
</table>

Section 12  Ecological information

12.1 Toxicity

**Acute (short-term) toxicity**
- **Fish**
  - *Oncorhynchus mykiss*, 96 hour LC₅₀ > 100 mg/L = $2.0 \times 10^9$ CpGV/L
- **Crustacea**
  - *Daphnia magna*, 48 hour LC₅₀ > 100 mg/L = $2.0 \times 10^9$ CpGV/L
- **Algae/aquatic plants**
  - *Scenedesmus subspicatus*, 72 hour EC₅₀ > 100 mg/L = $2.0 \times 10^9$ CpGV/L
- **Other organisms**
  - *Lemna gibba*, 7 day EC₅₀ > 100 mg/L = $3.1 \times 10^9$ CpGV/L

**Chronic (long-term) toxicity**
- **Fish**
  - Not determined
- **Crustacea**
  - Not determined
- **Algae/aquatic plants**
  - Not determined
- **Other organisms**
  - Not determined

12.2 Persistence and degradability

- **Abiotic Degradation**
  - pH
- **Physical- and photo-chemical elimination**
  - UV light
- **Biodegradation**
  - Soil microflora

12.3 Bioaccumulative potential

- **Octanol/water partition coefficient (Kow)**
  - Not determined
- **Bioconcentration factor (BCF)**
  - Not determined

12.4 Mobility in soil

- **Known or predicted distribution to environmental compartments**
  - CpGV persists in the soil for a fairly long period in the immobilised state and does not accumulate.
- **Surface tension**
  - Not determined
- **Adsorption/Desorption**
  - Not determined

12.5 Results of PBT and vPvB assessment

- This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects

- None
Section 13 Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Use pressure rinsing devices or triple rinsing with water to reduce any product residues in the container to insignificant levels. Don’t dispose product or containers on ponds, rivers or ditches. Don’t re-use containers for other purposes. Waste disposal and recycling contractors will take cleaned containers. Waste resulting from the use of the product must be disposed on site or on an approved waste disposal facility. Empty the sprayer out in the field being treated by spraying out on to a relatively pest free part of the field left unsprayed or under-dosed for the crop.

Waste codes/waste designations according to LoW

Not applicable

Waste treatment-relevant information

None

Sewage disposal-relevant information

Waste should not be disposed of by release to sewers

Other disposal recommendations

None

Section 14 Transport Information

Inland transport

Not restricted

Sea transport

Not restricted

Air transport

Not restricted

Section 15 Regulatory information

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

Authorisations

Not relevant

Restrictions on use

Not relevant

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

Section 16 Other information

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user’s own responsibility to make sure that the information is appropriate and complete for his special use of this product.

Indication of changes

Adapted to the regulation (EC) No. 1272/2008 [CLP]

Date of printing

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Composed by

Philip Kessler