1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Product Identifier: NIPPON ANT KILLER POWDER

1.2 Relevant uses of the substance or mixture and uses advised against:
Insecticide

1.3 Manufacturer/Distributor: Vitax Limited
Owen Street
Coalville
LE67 3DE
Tel: 01530 510060 Fax: 01530 510299 Email: tech@vitax.co.uk

1.4 Emergency Contact: Tel: 01530 510060 (Office Hours)

2. HAZARDS IDENTIFICATION

2.1 Classification: Classification according to Regulation (EC) No 1272/2008 (EU-GHS/CLP)

Health hazards
Elicitation - EUH208

Environmental hazards
Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2 Label Elements:
Contains 0.488% Permethrin (EC 258-067-9)

Signal word: Warning

Hazard statements:
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements
P102 Keep out of reach of children.
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local regulations.

EUH208 Contains PERMETHRIN. May produce an allergic reaction.

2.3 Other Hazards:

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No./EINECS-No.</th>
<th>Annex Index or REACH number</th>
<th>Symbol(s) and Phrases</th>
<th>Precautionary Statements:</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>52645-53-1 258-067-9</td>
<td>N/A</td>
<td>Acute Tox. 4 - H302, H332 Skin Sens. 1 - H317 Aquatic Acute 1 - H400, H410 M factor (Acute) = 1000 M factor (Chronic) = 1000</td>
<td></td>
<td>0.488%</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td>60-100%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

4.1. Description of first aid measures

General information
Inhalation
Remove victim immediately from source of exposure. Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention if any discomfort continues.

Ingestion
Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact
Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed
In some individuals a characteristic and reversible skin irritation effect characteristic of natural pyrethrins may be experienced. Deliberate ingestion could lead to neurological signs and symptoms such as ataxia, tremors or convulsions.

4.3 Indication of immediate medical attention and special treatment needed:
Not available.

5. FIRE FIGHTING MEASURES
5.1. Extinguishing media
Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products None under normal conditions.
Unusual Fire & Explosion Hazards Not known.

5.3. Advice for firefighters
Special Fire Fighting Procedures Avoid breathing fire vapours.
Protective equipment for fire-fighters Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES
6.1. Personal precautions, protective equipment and emergency procedures
Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions
Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up
Collect spillage with shovel, broom or the like and reuse, if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities.

6.4. Reference to other sections
None

7. HANDLING & STORAGE
7.1. Precautions for safe handling
Avoid inhalation of dust and contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed original container in a dry, cool and well-ventilated place. Keep separate from food, feedstuffs, fertilisers and other sensitive material.

Storage Class Miscellaneous hazardous material storage.

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

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION
8.1 Control parameters:
PERMETHRIN Long-term exposure limit (8-hour TWA): 5 mg/m³
Talc Long-term exposure limit (8-hour TWA): 1 mg/m³
OEL = Occupational Exposure Limit.
WEL = Workplace Exposure Limit

8.2 Exposure Controls:
Protective equipment Dustmask
Engineering measures Provide adequate general and local exhaust ventilation.
Respiratory equipment If ventilation is insufficient, suitable respiratory protection must be provided.
Hand protection Gloves.
Eye protection No specific eye protection noted, but may be required anyway.
Hygiene measures Wash hands at the end of each work shift and before eating, smoking and using the toilet.

9. PHYSICAL & CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties:
Appearance Powder, dust
9.2 Other information: None.

10. STABILITY & REACTIVITY
10.1. Reactivity: Not known
10.2. Chemical stability: Stable under normal temperature conditions and recommended use.
10.3. Possibility of hazardous reactions: Not known.
   Hazardous Polymerisation: Will not polymerise.
10.4. Conditions to avoid: Not relevant
10.5. Incompatible materials: No incompatible groups noted.

11. TOXICOLOGICAL INFORMATION
11.1. Information on toxicological effects
   Toxicological information:
   - Acute toxicity for permethrin LD50 oral rat 7500 mg/kg
   - LD50 dermal rat > 5100 mg/kg
   - Inhalation: Dust may irritate respiratory system or lungs.
   - Ingestion: May cause discomfort if swallowed.
   - Skin contact: Powder may irritate skin.
   - Eye contact: May cause temporary eye irritation.
   - Ecotoxicity: Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

12. ECOLOGICAL INFORMATION
   Ecotoxicity: This product has not been tested but contains ingredients which are toxic or very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.
   12.1 Toxicity:
   12.2 Persistence and degradability: no data
   12.3 Bioaccumulative potential: no data
   12.4 Mobility in soil: no data.
   12.5 Results of PBT and vPvB: not classified.
   12.6 Other adverse data: no data

13. DISPOSAL CONSIDERATIONS
13.1. Waste treatment methods: This material and its container must be disposed of in a safe way.

14. TRANSPORT INFORMATION
   General: This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Product not so packed and labelled must show the following.
   14.1. UN number
   - UN No. (ADR/RID/ADN) 3077
   - UN No. (IMDG) 3077
   - UN No. (ICAO) 3077
   14.2. UN proper shipping name
   Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN)
14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>ADR/RID/ADN</th>
<th>Class 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR/RID/ADN Class</td>
<td>Class 9: Miscellaneous dangerous substances and articles.</td>
</tr>
<tr>
<td>ADR Label</td>
<td>No. 9</td>
</tr>
<tr>
<td>IMDG</td>
<td>Class 9</td>
</tr>
<tr>
<td>ICAO</td>
<td>Class/Division 9</td>
</tr>
<tr>
<td>Transport Labels</td>
<td>MISCELLANEOUS DANGEROUS GOODS 9</td>
</tr>
</tbody>
</table>

14.4. Packing group

<table>
<thead>
<tr>
<th>ADR/RID/ADN</th>
<th>Packing group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMDG</td>
<td>Packing group III</td>
</tr>
<tr>
<td>ICAO</td>
<td>Packing group III</td>
</tr>
</tbody>
</table>

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

14.6. Special precautions for user

EMS: F-A, S-F
Emergency Action Code: 2Z
Hazard No. (ADR): 90
Tunnel Restriction Code: (E)

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific to this substance:


15.2 Chemical Safety Assessment

not undertaken for this material

16. OTHER INFORMATION

Reason for revision: MSDS re-formatted in-line with regulation 453/2010 all sections affected.

Hazard statements in full

EUH208 Contains PERMETHRIN. May produce an allergic reaction.
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Liability

The product label provides information on the use of the product: do not use otherwise, unless you have assessed any potential hazard involved and the safety measures required. Prepared by VITAX LTD, for Health and Safety purposes from the best knowledge available at the time of printing.