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

Name of Product: **NIPPON ANT KILLER POWDER**

Use of the Substance/Preparation: Household Insecticide Powder

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

Emergency Contact: Tel: 01530 510060 (Office Hours)

2. HAZARDS IDENTIFICATION

Classification: Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment. Contains permethrin. May cause allergic reaction.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formulation Type: Dustable powder containing permethrin (0.488%) on a talc base.

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>% w/w</th>
<th>CLASSIFICATION</th>
<th>CAS NO</th>
<th>EC NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>0.488</td>
<td>Xu N; R20/22, 43, 50/53</td>
<td>52645-53-1</td>
<td>258-067-9</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

In some individuals a characteristic and reversible skin irritation effect characteristic of natural pyrethrins may be experienced. Accidental over exposure may result in the following symptoms:

**Skin Contact:** Not anticipated to be an irritant.

**Eye Contact:** Possible irritation.

**Ingestion:** Unlikely occupational hazard. Deliberate ingestion could lead to neurological signs and symptoms such as ataxia, tremors or convulsions.

**Inhalation:** Irritation to respiratory system.

Additional medical guidance is available to doctors from the National Poisons Information Service.

Eye contact – rinse with water thoroughly. If irritation persists seek medical advice. Skin contact – wash with soap and water. Remove and wash contaminated clothing. Inhalation – remove to fresh air. If unwell seek medical advice.

5. FIRE FIGHTING MEASURES

**Extinguishing Media:** Non flammable. Extinguish, preferably with foam, CO₂, dry powder, water spray or water fog. Contain contaminated run-off.

**Additional Information:** Under intense heat, product decomposition may release hazardous nitrogen and carbon oxides.

**Special Protective Equipment:** Wear self-contained breathing apparatus and suitable protective clothing in confined spaces.
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Do not breathe dust. Do not eat, drink or smoke. Wash hands and exposed skin after handling.

Environmental precautions: Report to local water plc immediately if spillage enters drains and the Environment Agency or Scottish Environment Protection Agency if it enters surface or ground waters.

Spillages: Sweep up any spillage carefully to minimise dust and transfer to heavy duty plastic bags or drums and keep safe before disposal.

7. HANDLING & STORAGE

Handling: Do not block stack pallets. Store in original containers, tightly closed in a secure, well ventilated, cool but frost-free, dry area. Store clear of foodstuffs. Make arrangements for containment of accidental spillage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure standards have been established (EH40) for talc, see regulatory information for details. No specific personal protective equipment assigned. Normal good hygiene standards should be observed.

9. PHYSICAL & CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>off white powder</td>
</tr>
<tr>
<td>Odour</td>
<td>none</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling point</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting point</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash point</td>
<td>N/A</td>
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<tr>
<td>Flammability</td>
<td>non flammable</td>
</tr>
<tr>
<td>Flammability limits (%) vv</td>
<td>N/A</td>
</tr>
<tr>
<td>Autoflammability</td>
<td>N/A</td>
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<tr>
<td>Explosivity</td>
<td>N/A</td>
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<tr>
<td>Oxidising properties</td>
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<tr>
<td>Vapour Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.45 (untapped)</td>
</tr>
<tr>
<td>Solubility</td>
<td>insoluble in water</td>
</tr>
<tr>
<td>Other data</td>
<td>none</td>
</tr>
</tbody>
</table>

10. STABILITY & REACTIVITY

Stability: Stable under normal conditions

Conditions to Avoid: Avoid high temperatures.

Materials to Avoid: Oxidizing agents, strong acids and bases.

Hazardous Decomposition Products: Combustion or thermal decomposition will evolve carbon and nitrogen oxides and halogen compounds.

11. TOXICOLOGICAL INFORMATION

Permethrin is of low mammalian toxicity and is readily metabolised and excreted with immediate loss of toxicity.

Acute toxicity for permethrin LD50 oral rat 7500 mg/kg

LD50 dermal rat > 5100 mg/kg

Technical permethrin is an eye and skin irritant.
12. ECOLOGICAL INFORMATION

Mobility: Studies to investigate the leaching potential of permethrin and its degradates showed that very little downward movement occurs in soil. Permethrin in the aquatic environment absorbs to vegetation and hydrosol.

Persistence and degradability: Permethrin degradation in soil has a half-life of 28 days or less. The trans-isomer degrades more rapidly than the cis-isomer, with ester cleavage being the major degradative pathway.

Permethrin disappears rapidly from the aqueous environment, in 6-24 hours from ponds and streams and 7 days from pond sediment.

In water and on soil surfaces permethrin is photodegraded by sunglight. Ester cleavage and cis-trans interconversion are the major reactions. The degradative processes which occur in the environment lead to less toxic products.

Bioaccumulative potential: Bioaccumulation of permethrin in mammals and aquatic organisms is not expected.

Ecotoxicity: Permethrin is very toxic to aquatic organisms. Measured 96 hr LC₅₀ in fish ranges from 0.62-314 µg/litre on a flow through test and 3.2-5.7 µg/litre in a static test. Permethrin has a very low toxicity to mammals and birds. However permethrin is very toxic to bees, with a 24 hr measured topical LD₅₀ of 0.029 µg/bee.

13. DISPOSAL CONSIDERATIONS

Dispose of waste through a reputable waste disposal contractor or contact local Authority in accordance with Environmental Protection Act 1990.

14. TRANSPORT INFORMATION

LQ27 Dangerous goods in limited quantities
Environmental hazardous substance, Solid, N.O.S (Permethrin 0.488% mixture)
UN 3077. Packing group III.

15. REGULATORY INFORMATION

Approved under and labelled in accordance with the Control of Pesticides Regulations. Labelling under the Chemicals (Hazard Information and Packaging for Supply) Regulations:
N: Dangerous for the environment.
R50/53 Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
S7 Keep container tightly closed
S22 Do not breathe dust
S35 This material and its container must be disposed of in a safe way.
S24 Avoid contact with skin
S29 Do not empty into drains
S49 Keep only in the original container

Occupational exposure standards (EH40) in air. For talc: total inhalable 10 mg/m³ (8 hr) respirable 1 mg/m³ (8 hr).

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.
16. OTHER INFORMATION

This product label provides information on a specific pesticidal use of the product: do not use otherwise, unless you have assessed any potential hazard involved, the safety measures required, and that the particular use is permitted under the Control of Pesticides Regulations.

The information contained in this sheet is based on the best available information, including data from test results.

The classification of this preparation was carried out in accordance with directive 1999/45/EC and subsequent amendments modified by directive 2006/08/EC, taking account the directive 67/548/EC (Dangerous substances) modified by directive 2004/73/EC and Regulation (EC) 1907/2006 (REACH).