SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Pirimicarb
Product Type: 50% WG
Use: Group 1A Insecticide

SECTION 2 – HAZARDS IDENTIFICATION

Statement of Hazardous Nature
Classified as hazardous according to criteria of Safe Work Australia.
Classified as a Dangerous Good according to the ADG code

GHS Signal Word: Danger
Hazard statement:
H301: Toxic if swallowed.
H410: Very toxic to aquatic life with long lasting effects.

Prevention
P264 Wash contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.

Response
P310: Immediately call a POISON CENTER or doctor/physician.
P314: Get medical advice or attention if you feel unwell.
P301 + P310: IF SWALLOWED: immediately call a POISON CENTER or doctor.
P330: Rinse mouth.
P391: Collect spillage.

Storage
P405: Store locked up.

Disposal
P501: Dispose of contents and containers as specified on the registered label.

Risk Phrases:
R25 - Toxic if swallowed.
R50 - Very toxic to aquatic organisms.
R53 - May cause long-term adverse effects in the aquatic environment

Safety Phrases:
S1/2 - Keep locked up and out of the reach of children.
S22 - Do not breathe dust.
S37 - Wear suitable gloves
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60 - This material and its container must be disposed of as hazardous waste.
S61 - Avoid release to the environment. Refer to special instructions/Material Safety Data Sheets.

SUSMP Classification:
S6
ADG Classification: Class 6.1: Toxic substances.
UN Number: 2757, CARBAMATE PESTICIDE, SOLID, TOXIC

Emergency Overview
Physical Description & colour: milky white granule
Odour: odourless

Potential Health Effects

Inhalation:
Short Term Exposure: Symptoms are described fully above.
Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:
Short Term Exposure: Symptoms are described fully above.
Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:
Short Term Exposure: This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.
Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:
Short Term Exposure: Symptoms are described fully above.
Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:
SWA: No significant ingredient is classified as carcinogenic by SWA.
NTP: No significant ingredient is classified as carcinogenic by NTP.
IARC: Talc is Class 3 - unclassifiable as to carcinogenicity to humans.
See the IARC website for further details. A web address has not been provided as addresses frequently change.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pirimicarb</td>
<td>23103-98-2</td>
<td>50% w/v</td>
</tr>
<tr>
<td>Other ingredients</td>
<td></td>
<td>To 100 % w/v</td>
</tr>
</tbody>
</table>

SECTION 4 – FIRST AID MEASURES

<table>
<thead>
<tr>
<th></th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swallowed</td>
<td>If swallowed, DO NOT induce vomiting. Seek medical advice or contact Poisons Information Centre (Ph 13 11 26). Make every effort to prevent vomit from entering the lungs by careful placement of the patient.</td>
</tr>
<tr>
<td>Eye</td>
<td>Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical attention.</td>
</tr>
<tr>
<td>Skin</td>
<td>Remove contaminated clothing and launder before use. Wash affected areas or skin thoroughly with soap and water. Seek medical advice if irritation develops.</td>
</tr>
<tr>
<td>Inhaled</td>
<td>Remove to fresh air until recovered. If symptoms persist, seek medical advice.</td>
</tr>
</tbody>
</table>

Advice to Doctor:
Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES
Fire and Explosion Hazards: There is little risk of an explosion from this product if commercial quantities are involved in a fire.

Poisons Information Centre: 13 1126 from anywhere in Australia
Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media
Water fog, foam, carbon dioxide or dry chemical.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is liquid-tight chemical protective clothing and breathing apparatus.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills & Disposal
In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection.
Product spill: Sweep granules and shovel or collect recoverable product into labeled containers for recycling or salvage, and dispose of promptly.
Prepared spray spill: Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labeled containers for recycling or salvage, and dispose of promptly.
Wash the spill area with detergent and water.
Launder protective clothing before storage or re-use.

SECTION 7 – HANDLING AND STORAGE

Handling
When handling this product, do not eat, drink or smoke.
When mixing this product always wear a PVC or rubber apron, elbow length PVC gloves, face shield or goggles and overalls buttoned at the wrist and neck.
When spraying this product, wear a face shield or goggles
After each days use, wash gloves, face shield or goggles and overalls.
If product gets on skin, immediately wash area with soap and water.

Storage
Store in the closed, original container in a well-ventilated area as cool as possible out of direct sunlight. Keep from contact with fertilisers and seeds.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits
The following Australian Standards will provide general advice regarding safety clothing and equipment:

<table>
<thead>
<tr>
<th>Swa Exposure Limits</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate</td>
<td>10</td>
<td>not set</td>
</tr>
</tbody>
</table>

The ADI for Pirimicarb is set at 0.002mg/kg/day. The corresponding NOEL is set at 0.4mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Dec 2008.
No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Engineering Controls
Handle in well ventilated areas. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

**Personal Protective Equipment**
When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles.

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form:</strong></td>
<td>Granule</td>
</tr>
<tr>
<td><strong>Colour:</strong></td>
<td>Milky white</td>
</tr>
<tr>
<td><strong>Odour:</strong></td>
<td>Odourless</td>
</tr>
<tr>
<td><strong>Vapour Pressure:</strong></td>
<td>$4 \times 10^{-1}$</td>
</tr>
<tr>
<td><strong>Boiling Point:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flammability Limit:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Specific Density:</strong></td>
<td>$1.18 \pm 0.01\text{ (25°C)}$</td>
</tr>
<tr>
<td><strong>Water Solubility:</strong></td>
<td>Soluble in water</td>
</tr>
</tbody>
</table>

### SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability**
Stable under normal conditions.

**Hazardous Reaction**
Keep away from strong oxidising agents.

**Hazardous Polymerization**
Hazardous polymerisation is not possible.

**Materials to Avoid**
Combustible materials.

### SECTION 11 – TOXICOLOGICAL INFORMATION

**Toxicity Pirimicarb:**
Acute oral LD$_{50}$ (rat) = 100 - 200 mg/kg
Acute dermal LD$_{50}$ (rabbit) = >2000mg/kg
Acute inhalation LC$_{50}$ (rat) = 0.86 mg/L (4 hours)
**Reproductive Effects:** No reproductive toxicity.
**Teratogenic Effects:** No teratogenic effects.
**Mutagenic Effects:** No evidence of mutagenicity.
**Carcinogenic Effects:** No carcinogenic effects.

**Classification of Hazardous Ingredients**
Ingredient Risk Phrases
Pirimicarb Conc>=25%; T; R25

**Pirimicarb:** LD50 Oral, Rat 100-200mg/kg LC50 Inhalation, Rat = 0.86mg/L/4hr

### SECTION 12 – ECOLOGICAL INFORMATION

**Ecotoxicity Birds:**
Pirimicarb is highly toxic to birds.
Oral LD$_{50}$ (Bob-white quail) = 20.9 mg/kg
Oral LD$_{50}$ (Mallard duck) = 28.5 mg/kg
Aquatic Organisms:
LC₅₀ 96hr (Rainbow trout) = 79 mg/L
LC₅₀ 48hr (Bluegill sunfish) = 55 mg/L

Other Animals:
Pirimicarb is not toxic to bees.

Mobility
Pirimicarb shows low mobility and low potential for bioaccumulation in the soil.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal: Instructions concerning the disposal of this product and its containers are given on the product label. These should be carefully followed.

SECTION 14 – TRANSPORT INFORMATION

U.N. Number 2757

Proper Shipping Name CARBAMATE PESTICIDE, SOLID, TOXIC (CONTAINS PIRIMICARB 50%)

DG Class 6.1

Hazchem Code 2X

Packing Group III

Storage and Transport Considered as a dangerous good for transport by the Australian Code for the Transport of Dangerous Goods by Road and Rail.

SECTION 15 – REGULATORY INFORMATION

Poisons Schedule S6

Packaging & Labelling POISON
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Hazard Category Irritant

AICS (Australia) All of the components in this product are listed on the Australian Inventory of Chemical Substances.

SECTION 16 – OTHER INFORMATION

This MSDS contains only safety-related information. For other data see product literature.

CONTACT POINT:

Police and Fire Brigade: Dial 000

National Poisons Information Centre: Dial 13 11 26 (from anywhere in Australia)

For 24 hour emergency response: Dial 0439 933 556
Ask for Murray Goodlich