

## 1: Identification of the Substance and Supplier

<b>Product Name</b>	<b>ACTELLIC DUST</b>
<b>Recommended Use</b>	Insecticide
<b>Company Details</b>	Orion Crop Protection Ltd Unit 1, 15 Sir Gil Simpson Drive, Harewood, Christchurch, 8053 PO Box 39 071, Harewood, Christchurch, 8545
<b>Web Address</b>	www.orioncp.co.nz
<b>Email Address</b>	orders@orioncp.co.nz
<b>Telephone Number</b>	(03) 928 2386 (office hours), 0800 674 6627 (free phone)
<b>Emergency Telephone</b>	0800 CHEMCALL (0800 243 622) (24 hours)
<b>National Poison Centre</b>	0800 POISON (0800 764 766) (24 hours)
<b>Date of Issue/Revision</b>	June 2014

## 2: Hazards Identification

<b>Hazard Pictograms</b>	
<b>Priority Identifiers:</b>	<b>Ecotoxic</b>
<b>HSNO Classes:</b>	<b>Secondary Identifiers:</b>
<b>6.8B</b>	May cause reproductive/development damage from repeated ingestion
<b>6.9B</b>	May cause neurological symptoms from repeated ingestion at high doses
<b>9.1A</b>	Very toxic to aquatic organisms
<b>9.3C</b>	Harmful to terrestrial vertebrates
<b>9.4C</b>	Harmful to terrestrial invertebrates

## 3: Composition/ Information on Ingredients

Ingredient	CAS No	Content (% w/v)
Pirimiphos-methyl (active ingredient)	29232-93-7	2
Other ingredients, stabiliser, filler, etc	Proprietary	Remainder

## 4: First Aid Measures

<b>Skin Contact</b>	In case of contact, immediately wash affected area with soap and water. Wash contaminated clothing before reuse. Seek medical advice if irritation persists.
<b>Eye Contact</b>	Hold eyes open and rinse with water for at least 15 minutes. Remove contact lenses if easy to do so. Seek medical advice if irritation persists.
<b>Ingestion</b>	Do not induce vomiting. Keep strictly at rest as continued movement enhances toxic effects. Seek medical advice immediately.
<b>Inhalation</b>	Immediately move to fresh air and rest. Maintain half upright position if breathing is difficult. Seek medical advice if feeling unwell.
<b>Workplace Facilities</b>	Hand wash facility. Eye wash facility.
<b>Advice to Doctor</b>	Actellic Dust is an organophosphorus insecticide, which inhibits cholinesterase activity, and interferes in nerve pulse transmission. On set of symptoms may be delayed for several hours. Atropine is the specific antidote and may be given immediately by qualified staff, at a level of 2 - 5mg (intravenously or intramuscularly), every 20 minutes until atropinisation occurs. Considerable amounts of atropine may be necessary. Atropine must NOT be given to cyanosed patients; administer oxygen first. Do NOT use opiates or barbiturates. If convulsions occur, administer diazepam (10mg intravenously). Take venous blood sample for determination of blood cholinesterase activity. Cholinesterase reactivators (Pralidoxime) should, if possible, be given at the same time as atropine. They are not effective after 24 hours post exposure and are not substitutes for atropine. Pralidoxime should be administered at: Mild poisoning: 1g in 2 - 3ml water (intramuscularly), Severe poisoning: 2g in 30ml water (intravenously). Following ingestion, adsorbents such as charcoal may be of value.
<b>National Poison Centre</b>	0800 POISON (0800 764 766) (24 hours)

## 5: Fire-Fighting Measures

<b>Fire/Explosion Hazard</b>	May be combustible in a fire. As with many dusts, an explosive air/dust mixture may be formed if rough handling liberates dust in enclosed or poorly ventilated areas.
<b>HAZCHEM Code</b>	2Z
<b>ERP Guide No</b>	47
<b>Extinguishing Media</b>	Water spray, foam, dry chemical or CO2.
<b>Fire Fighting Instructions</b>	During a fire, toxic fumes may be emitted. Wear self-contained breathing apparatus. Contain runoff.

## 6: Accidental Release Measures

Exclude non-essential people from the area. Wear protective clothing as described in section 8. Do not inhale dust. Moisten to prevent dusting and carefully sweep up. If dust is generated, wear respiratory protection. Place in a waste container. Dispose of safely to a suitable landfill.

## 7: Storage, Handling and Use

<b>Storage</b>	Keep out of reach of children. Store in the original, tightly closed container, in a secure area away from foodstuffs. Do not store for prolonged periods in direct sunlight.
<b>Handling and Use</b>	Keep out of reach of children. Avoid contact with eyes and skin. Avoid inhalation of dust. When mixing or applying, wear protective clothing as described in section 8. Do not eat, drink or smoke while using. Wash hands and face after use. Wash protective clothing after use.
<b>Approved Handler</b>	Not required.
<b>Tracking</b>	Not required.
<b>Record Keeping</b>	Record of use must be kept if 3Kg or more is used in an area within 24 hours, and is likely to enter air or water and leave that place.
<b>REI</b>	Not applicable
<b>Site Requirements under the HSNO Act 1996 and HSNO Regulations:</b>	<ul style="list-style-type: none"> <li> A location test certificate is not required</li> <li> A hazardous atmosphere zone is not required</li> <li> Fire extinguishers are not required</li> <li> Signage is required for 100 Kg or more</li> <li> Emergency information is required for 3 Kg or more</li> <li> An emergency plan is required for more than 100 Kg</li> <li> Secondary containment is not required</li> <li> Separation/Segregation from incompatible substances is not applicable</li> </ul>
<b>Additional Requirements</b>	All aspects of storage, handling, use, disposal and record keeping must be in accordance with NZS 8409:2004 'Management of Agrichemicals', and relevant local and regional council plans

## 8: Exposure Control / Personal Protection

<b>Tolerable Exposure Limit</b>	None established.
<b>Workplace Exposure Standards</b>	<p><b>Product</b> – None established (Use lowest practicable level).</p> <p><b>Active ingredient</b> – None established (Use lowest practicable level). [Recommendation: Pirimiphos-methyl 3 mg/m<sup>3</sup> (8hr TWA)]</p> <p><b>Excipients</b> – None established (Use lowest practicable level).</p>
<b>Engineering Controls</b>	Limited given nature of use.
<b>Personal Protection:</b>	
<b>Eye</b>	Safety glasses/goggles (or full face respirator incorporating visor) when handling or applying.
<b>Skin</b>	Cotton overalls snugly fitting at the neck, wrist and ankle, boots and gloves (PVC, nitrile, neoprene) when handling or applying.
<b>Respiratory</b>	Respirator (organic vapour and particulate matter) when handling or applying.
<b>Biological Monitoring</b>	Regular users in direct contact (mixing and application) should undergo biological monitoring of cholinesterase activity. Consult with your GP or Occupational Health Adviser.

## 9: Physical and Chemical Properties

<b>Appearance</b>	Dust – Grey/Brown
<b>Odour</b>	Non specific
<b>Melting Point</b>	Not available
<b>Flash Point</b>	Not applicable
<b>Auto ignition Temperature</b>	Not applicable
<b>Explosive Limits</b>	Not available. As with many dusts, an explosive air/dust mixture may be formed if rough handling liberates dust in enclosed or poorly ventilated areas.
<b>Density</b>	Not available
<b>Vapour Pressure</b>	2 mPa (20°C) (pirimiphos-methyl)
<b>Vapour Density</b>	Not volatile
<b>Solubility in Water</b>	Not soluble
<b>pH</b>	Not applicable
<b>Oxidising Properties</b>	Not an oxidizer
<b>Corrosive Properties</b>	Not a corrosive

## 10: Stability and Reactivity

<b>Stability</b>	Stable under normal conditions.
<b>Incompatibility</b>	Avoid mixing with strong acids, alkalis, and oxidizing agents such as chlorine compounds,

**Decomposition**  
**Dangerous Reactions**

ammonium nitrate, etc.  
Decomposition will not occur under normal conditions.  
Products arising from combustion or thermal decomposition may be toxic, corrosive or flammable.

**11: Toxicological Information**

This section describes effects which could occur if this material is not handled in accordance with this data sheet.

<b>Swallowed</b>	Excessive sweating, salivation, headache, weakness, faintness, nausea, diarrhoea, small pupils, blurred vision, muscle twitching.
<b>Eye</b>	Mild irritation. May cause constriction of the pupil.
<b>Skin</b>	Mild irritation. Can be absorbed via the skin (see symptoms under 'swallowed' above).
<b>Inhalation</b>	Irritation.

Note: Symptoms may be delayed for up to 24 hours or more following exposure

<b>Acute Toxicity (Active Ingredient)</b>	<ul style="list-style-type: none"> <li> Acute Oral LD50 (Rat) 1414 mg/kg</li> <li> Acute Dermal LD50 (Rat) &gt; 2000 mg/kg</li> <li> Inhalation LC50 (4 hr) (Rat) &gt; 5.04 mg/l</li> </ul>
<b>Sensitisation Effects</b>	None.
<b>Mutagenic Effects</b>	None
<b>Carcinogenic Effects</b>	None
<b>Reproductive Effects</b>	Suspected
<b>Teratogenic (Birth) Effects</b>	Suspected
<b>Systemic Effects</b>	Interferes with cholinesterase, an enzyme essential for the correct functioning of the nervous system.

**12: Ecotoxicity Information**

This section describes effects which could occur if this material is not handled in accordance with this data sheet.

The following information is presented in respect of the active ingredient:

<b>Ecotoxic Effects</b>	<ul style="list-style-type: none"> <li> Acute Oral LD50 (Bobwhite quail) 40 mg/kg</li> <li> LC50 (96 hr) (Rainbow trout) 0.64 mg/l</li> <li> LC50 (48 hr) (Daphnia) 0.21 µg/l</li> <li> Algae EC50 1.0 mg/l</li> <li> Toxic to bees.</li> </ul>
<b>Environmental Fate</b>	Biodegradable. DT50 (soil) 3.5 – 30 days.
<b>Partition Co-Efficient (Kow)</b>	LogP = 4.2 (high)
<b>Environmental Exposure Limit:</b>	None established.

**13: Disposal Considerations**

<b>Product</b>	Dispose of product by using it in accordance with the label. Do not burn. Waste product should be disposed of to a suitable landfill. For disposal of large quantities contact Orion Crop Protection Ltd.
<b>Container</b>	Dispose of to a suitable landfill or agricultural recycling scheme. Do not burn. Do not use packaging for any other purpose.

**14: Transport Information**

<b>Dangerous Goods</b>	
<b>UN Number</b>	3077
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PIRIMIPHOS-METHYL 2%)
<b>Class</b>	9
<b>Subsidiary Class</b>	None
<b>Packing Group</b>	III
<b>Additional Information</b>	ORGANOPHOSPHORUS INSECTICIDE. MARINE POLLUTANT.
<b>MTQ (Non-Commercial)</b>	250 Kg
<b>Passenger Service Vehicle:</b>	No restriction

**15: Regulatory Information**

<b>HSNO Approval No</b>	HSR000197
<b>ACVM Registration No</b>	P3591

## 16: Other Information

### Glossary

<b>Approved Handler</b>	For some hazardous substances, persons storing, handling and using must be trained and certified
<b>DT50</b>	Time (days) for 50% reduction in concentration
<b>EC50</b>	Concentration required to produce an effect in 50% of organisms
<b>Environmental Exposure Limit</b>	Maximum concentration limit of a substance in an environmental medium, e.g., water, soil.
<b>ERP Guide</b>	Dangerous Goods – Initial Emergency Response Guide SNZ HB 76:2008
<b>HAZCHEM Code</b>	Emergency action code for emergency services
<b>HSNO</b>	Hazardous Substances and New Organisms
<b>LC50</b>	Concentration that will kill 50% of organisms
<b>LD50</b>	Dose that will kill 50% of organisms
<b>MTQ</b>	Maximum Transport Quantity. The maximum amount of dangerous goods that can be transported by road by the user
<b>Partition Co-Efficient Kow</b>	Ratio of concentration between octanol and water. Values are given as the log value. A high value indicates a substance may bioaccumulate
<b>Record Keeping</b>	Includes a spray diary
<b>REI</b>	Restricted Entry Interval – The length of time after application before entry into the treated area is permitted without the use of protective equipment. For indoor environments, this time period commences once ventilation after treatment begins.
<b>Safety Note</b>	A brief document providing hazardous substance information for transport, storage and emergency management purposes
<b>STEL</b>	Short term exposure level
<b>Tolerable Exposure Limit</b>	Maximum concentration limit of a substance above which persons must not be exposed
<b>Tracking</b>	For some hazardous substances, a record must be kept of the transport, storage, sale and use of the product
<b>TWA</b>	Time weighted average
<b>Workplace Exposure Standard</b>	An occupational health standard limiting concentrations of specified substances to which persons are exposed
<b>Wide Dispersive Use</b>	A method of application involving equipment such as boom sprayers, mist blowers, vine sprayers, row sprayers, etc., as well as aerial application. Hand gunning within 30m of a property boundary is also classed as wide dispersive use. Knapsack sprayers are not classed as wide dispersive use

### Please Note

Users must ensure that the most up to date version of this safety data sheet is used.

This Safety Data Sheet summarises information on this product, and how to safely handle and use the product. Each user should familiarise themselves with the product label, Safety Note and Safety Data Sheet, and consider the information in the context of how the product will be handled and used, including in conjunction with other products. Orion Crop Protection Ltd assumes no responsibility for the accuracy, completeness or suitability of this information. The user is responsible for determining the suitability and accuracy of this information for their particular purposes.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Always read the product label before use.