

**orion** AGRISCIENCE

**COMBUSTIBLE LIQUID | TOXIC | ECOTOXIC**  
KEEP OUT OF REACH OF CHILDREN

# Chlor-P

## 480EC

### INSECTICIDE

A broad spectrum insecticide for use in  
range of ARABLE and FRUIT crops.

**Active Ingredient:**

480g/litre chlorpyrifos in the form of an emulsifiable concentrate.



9 421004 531955

**5 Litres**

PLEASE READ THE LABEL COMPLETELY BEFORE USE



**HAZARD CLASSIFICATIONS:** 3.1D, 6.1C, 6.3B, 6.4A, 6.8B, 6.9A, 9.1A, 9.2B, 9.3A, 9.4A

**DANGER: FLAMMABLE, TOXIC, ECOTOXIC**

Combustible liquid. May be fatal if swallowed, inhaled or absorbed through the skin. May cause eye and mild skin irritation. May cause reproductive/developmental effects from repeated ingestion. May cause neurological symptoms following exposure (See 'Symptoms of Poisoning' below). Very toxic to aquatic organisms. Harmful to soil organisms. Very toxic to terrestrial vertebrates and terrestrial invertebrates.

**PRECAUTIONS**

**APPROVED HANDLER:** This product must be under the control of an approved handler or secured.

**TRACKING:** This product must be tracked – Refer to NZS 8409 Management of Agrichemicals.

**STORAGE:** Keep out of reach of children. Do not store near heat, flame or other source of ignition. Store in the original, tightly closed container, in a secure area away from foodstuffs. Storage of certain quantities of this product trigger specific storage requirements (Refer to Safety Note). When stored appropriately this product should show no significant degradation for two years from the date of manufacture. Contact your supplier for further information about the use of product that is older than this.

**PERSONAL PROTECTION:** Avoid contact with eyes and skin. Avoid inhalation of vapour or spray mist. When mixing, loading, applying, or entering the treated area within 24 hours of application, wear chemical resistant coveralls, boots and gloves, head covering for overhead exposure, and eye protection. A respirator (organic vapour and particulate matter) is required where spray mist or vapour could be inhaled. Clean protective clothing daily after work. Do not eat, drink or smoke while using. Remove protective clothing and wash hands and face thoroughly before meals and after work. **USE:** Avoid handling, mixing or use of the undiluted product or container near heat, flame or other source of ignition. Apply with well maintained and calibrated spray equipment.

**DISPOSAL:** Dispose of this product only by using in accordance with this label, or at a suitable landfill. Do not burn. Triple rinse container and add rinse to the spray tank. Dispose of container to a suitable landfill or agricultural recycling scheme. Do not burn. Do not use container for any other purpose.

**ENVIRONMENTAL:** Use this product carefully. Do not contaminate aquatic environments with product, spray drift or empty container. Do not allow spray drift outside the target area to occur. Very toxic to bees – Do not apply to any plant or tree likely to be visited by bees at the time of application, immediately after application until the spray has dried, or in areas where bees are foraging. Use of this product must not cause adverse effects beyond the boundary of the treated property, and must also avoid adverse effects from spray drift occurring. Mitigation measures employed must be recorded as part of the application records. For aerial application, use of this product is subject to notification requirements to neighbours and others who may be affected.

Batch No:

Date of manufacture:

CHLOR-P

**Symptoms of Poisoning**

These may include excessive sweating, headache, weakness, faintness, dizziness, nausea, stomach pains, vomiting, small pupils, blurred vision and muscle twitching.

**First Aid**

If swallowed do not induce vomiting. If splashed in eyes, wash out immediately with running water for several minutes. If skin or hair contact occurs, remove contaminated clothing and wash with soap and running water. If inhaled, immediately move to fresh air and rest. Maintain half upright position if breathing is difficult. Call the National Poisons Centre **0800 POISON (0800 764 766)** (24 hrs) or a doctor immediately for advice.

**Emergency Response**

In a transport emergency call **111, Police or Fire Brigade**. In a fire, evacuate and call **111 Fire Brigade**. For specialist advice in an emergency only, call **0800 CHEMCALL (0800 243 6225)** (24 hrs).

**Spillage**

Extinguish any ignition sources. Exclude non-essential people from the area. Wear protective clothing and prevent material from entering waterways. Absorb spill with inert material such as soil, sand, etc, and place in a waste container. Wash area with water and detergent, and absorb with further inert material. Dispose of safely to a suitable landfill.

**Safety Data Sheet**

Additional information is provided in the safety data sheet. Freephone **0800 ORIONAS (0800 674 6627)** or visit [www.orionagriscience.co.nz](http://www.orionagriscience.co.nz)

**WARRANTY**

This formulation is warranted to contain the specified active ingredient within accepted analytical tolerance when packed. The user bears the risk for damage resulting from factors beyond the manufacturer's control. The manufacturer declines all liability for damage resulting from improper storage or use of the product.

Registered pursuant to the ACVM Act 1997, No. P4852

See [www.foodsafety.govt.nz](http://www.foodsafety.govt.nz) for registration conditions.

Approved pursuant to the HSN0 Act 1996, No. HSR000224

See [www.epa.govt.nz](http://www.epa.govt.nz) for approval conditions.

<sup>TM</sup>CHLOR-P is a Trade Mark of Orion Agriscience Limited

**Registrant:** Orion AgriScience Limited, Unit 1, 15 Sir Gil Simpson Drive, Hawerood, Christchurch 8053  
[www.orionagriscience.co.nz](http://www.orionagriscience.co.nz)

**UN 3018  
ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC (CHLORPYRIFOS 48%)  
PACKING GROUP III  
HAZCHEM CODE 2X  
IN A TRANSPORT EMERGENCY, DIAL 111 POLICE OR FIRE BRIGADE.  
FOR SPECIALIST ADVICE IN AN EMERGENCY CALL 0800 CHEMCALL (0800 243 622)**





## PLEASE READ THE LABEL COMPLETELY BEFORE USE

### GENERAL INFORMATION

Chlor-P 480EC is a broad spectrum insecticide for use in a wide range of arable and fruit crops.

### MIXING

Partly fill the spray tank with water. Add the measured quantity of Chlor-P 480EC. Agitate while adding the balance of water. Use a surfactant where directed for each crop in the situations for use table. Follow the label rate of the surfactant used. Where water with a high pH or water containing calcium salts cannot be avoided, the addition of a pH Buffer is recommended to reduce chemical deactivation and hydrolysis.

### COMPATIBILITY

Chlor-P 480EC is compatible in tank mixes with most commonly used pesticides. Chlor-P 480EC is NOT compatible with products such as a Bordeaux mixture or lime sulphur, or with other products that have a high alkalinity.

### RAINFALL

Do not spray if rain is expected within 3 hours of spraying.

### WITHHOLDING PERIODS

**It is an offence for users of this product to cause residues exceeding the relevant MRL in the New Zealand (Maximum Residues Limits of Agricultural Compounds) Food Standards.**

Avocados, Grapes and Maize	14 days
Brassicas and Fodder Crops , ( including Fodder Beet),	
Pasture, Ryegrass	7 days
Cereals (Grain Harvest)	8 weeks
Kiwifruit	Do <b>NOT</b> apply after bud cracking (first visible petals)
Lucerne	7 days
Onions	7 days
Pipfruit and Stonefruit	Do <b>NOT</b> use after the start of flowering
Squash	10 days
Export Crops	Contact your exporter or industry crop adviser.

### RESISTANCE MANAGEMENT

**GROUP 1 INSECTICIDE**

Chlor-P 480EC contains the organophosphorus compound chlorpyrifos. Resistance to this insecticide could develop from excessive use. To minimise this risk, use strictly in accordance with label instructions. Consult <http://resistance.nzpps.org/index.php> for alternative modes of action and details of resistance management strategies (if any) for the insect pests listed on the label.

**PLEASE READ THE LABEL COMPLETELY BEFORE USE**

**DIRECTIONS FOR USE**

**It is an offence to use this product on animals.**

**a) BROAD ACRE CROPS**

Crop	Insects Controlled	Rates of Use / ha	Critical Comments
Brassicas and Fodder Crops	Aphids	300 – 400 mL in 100 - 200 L/ha water Aerial water rate: 50 - 100 L/ha	Apply as necessary.
	Nysius Wheat Bug	1.25 L in 100 - 200 L/ha water	Apply to seedling crops as soon as damage is apparent or when nymphs can be seen feeding on seedlings.
	Springtails	200 mL in 50 – 200 L/ha water	Apply 1 – 2 days before crop emergence or as soon as damage is first noticed.
Cereals	Aphids (Cereal, Rose and Grain)	300 – 400 mL	Apply at the first sign of infestation. Use the high rate when insect pressure is high or where the crop is dense.
	Argentine Stem Weevil	1.25 L	Apply as soon as eggs are present on the lower leaf sheath.
Fodder Beet	Nysius Wheat Bug	1.25 L	Apply to seedling crops as soon as damage is apparent or when nymphs can be seen feeding on seedlings.
Lucerne	Aphids	300 – 450 mL	Apply as soon as aphids appear. Use the lower rate on short crops with little leaf, and the higher rate on tall leafy crops. Do <b>NOT</b> spray plants in flower.
	Sitona Weevil	600 – 800 mL in 100 – 200 L/ha water	To control adults, apply in mid – late May, after flights cease and before egg laying occurs. Use the high rate in dense stands.
Maize	Army Caterpillar, Corn Earworm	500 mL	Apply immediately damage is first seen and repeat if necessary 14 – 21 days later.
	Cutworm	600 mL	Use in sufficient water for complete coverage of the seedlings and surrounding soil. Spray in the evening at the first sign of damage.

Crop	Insects Controlled	Rates of Use / ha	Critical Comments
Onions	Onion Thrips	1 L in 400 – 500 L/ha water. The use of a wetting agent is recommended	Apply when monitoring shows numbers exceed recommended action threshold level. Apply 3 – 4 applications at 10 – 14 day intervals. Close intervals to 5 – 7 days during hot conditions. If further treatments are required, use an insecticide with a different mode of action.
Pasture	Argentine Stem Weevil	1.25 in 100 - 200 L/ha water	Apply as soon as eggs are present on the lower leaf sheath.
	Army Caterpillar	400 mL in 100 - 200 L/ha water Aerial water rate: 50 - 100 L/ha	Apply at the first sign of damage, usually where excess surface water or flooding has occurred.
	Lucerne Flea (Clover Flea)	200 mL	Apply late autumn / early winter at the first sign of clover damage.
	Porina Caterpillar	1.25 – 1.7 L in 100 - 200 L/ha water Aerial water rate: 50 - 100 L/ha	Before application, pastures should be closely grazed. Use the lower rate before frosts start occurring.
	Tasmanian Grass Grub	1.25 – 1.5 L in 100 – 200 L/ha water	Apply to short dry pasture between April – June at the first sign of pasture damage. Harrow dung patches prior to spraying to expose the grubs. Use the higher rate when grub numbers are high.
Ryegrass	Argentine Stem Weevil	1.25 L	Apply as soon as eggs are present on the lower leaf sheath.
Winter Squash	Aphids, Caterpillars	500 mL in 200 L/ha water	Apply as a single application soon after emergence, at the first signs of insects or insect damage.
		500 mL in 500 L/ha water Aerial water rate: 50 L/ha min	As a pre-harvest clean up, apply only when flowering has finished.

**b) HORTICULTURAL CROPS**

Crop	Insects Controlled	Rate per 100 Litres of Water	Critical Comments
Avocados	Leafroller	50 – 75mls	Apply pre-flowering, at petal fall, and then at 21 day intervals until late April. Continue applications if leafroller is still present.
Grapes (Except Table Grapes)	Aphids, Leafroller, Mealy Bug, Scale Crawler and Thrips	50 - 75mls	Do <b>NOT</b> apply less than 1.0 litre/ha at full foliage. Good penetration of bunches is required for Mealy Bug control and where populations are large, use the higher rate. Apply at: (1st) Bud swell (2nd) Pre Flower (3rd) Post Flower (4th) 14 days later and thereafter every 3 weeks until the season is complete.
Kiwifruit	Greedy Scale and Leafroller	50mls	Do <b>NOT</b> apply less than 1.0 litre/ha. Use a non-ionic wetting agent. For total control 2 applications are required. Apply at: (1st) At green tip. 10 days must have passed from the last application of a dormant lime sulphur. (2nd) Just prior to blossom. For Greedy Scale, the canes, leaders and vine trunks must be totally covered. Do <b>NOT</b> apply when flowering.
Pipfruit and Stonefruit.	Brown Beetle, Mealy Bug, Scale Crawler and Woolly Aphid.	80mls	Do <b>NOT</b> apply less than 3.0 litres/ha on mature trees. For Stonefruit, apply at early bud movement with a recommended spraying oil. For Pipfruit, apply at bud movement with a recommended spraying oil, and repeat 10 - 12 days later.

**NOTE:** Do **NOT** exceed 3.1 L/ha for any application.