

## Cyren

A broad-spectrum insecticide for control of insect pests in a wide range of crops.

**Contains:** 480 g/l (46.4% w/w) chlorpyrifos

**Crops:** Wheat, barley, oats, maize, permanent grassland, rotational grass, amenity grassland, managed amenity turf, broccoli, Brussels sprouts, cabbage, calabrese, cauliflower, chinese cabbage, sugarbeet, onions, apples, pears, plums, strawberries, raspberries, gooseberries, currants

**Pack size:** 5 litres

**Packs/pallet:** 40 x 4 x 5 litres

### Directions

**For Use:** 1. **Wheat Barley and Oats**

<u>(†) Maximum Individual Dose</u>	<u>(†) Maximum Number of Treatments</u>	<u>(†) Latest Time of Application</u>
1.5 and	Two per crop	Before 'flag leaf sheath extending' stage (ZGS 39)
1.0 or	One per crop	Before flowering (ZGS 59)
0.7	One per crop	14 days before harvest

Pest	Rate per hectare	Timing of application
Wheat blossom midge	1.0 litre	Spray only those fields where populations of Wheat blossom midge above the threshold have been identified. Spray between ear emergence and the beginning of flowering to control developing larvae. Treatment should commence once the majority of ears have emerged. Ears not emerged at the time of treatment will not be protected. A sufficient water volume should be used to ensure good coverage and contact with the pest. Applications beyond flowering, once the majority of ears have commenced flowering, are unnecessary since adult midges are repelled by cereal pollen.
Frit fly	1.5 litres	CYREN insecticide may be applied prior to desiccation and/or ploughing of a grass crop which precedes winter wheat. CYREN is compatible with MAFF 10526 (approved formulations of paraquat) at recommended rates and timings. Post-drilling applications to winter wheat are recommended in situations where matted dense swards contain significant amounts of susceptible species (e.g. ryegrass). Application to winter wheat can be made pre-crop emergence (but post-drilling), at crop emergence (early post-emergence) or at the first sign of damage. Later applications may be less effective. Winter wheat crops following late sown spring oats may also be attacked. Applications to spring oats should be made at the first sign of attack and not later than 2 leaf stage of the crop. Later applications may be less effective.
Leatherjackets	1.5 litres	Spray as soon as damage is first seen, usually between March and May but may be earlier in some seasons. Roots and stems are attacked at or below ground level and plants die off rapidly.

Wheat bulb fly	1.5 litres	CYREN is a persistent soil insecticide and should be applied at egg hatch, (normally from early January to the end of February). In the event of a prolonged egg hatch a repeat application of CYREN may be required, particularly on organic soils. When an attack is established and dead hearts are visible, a systemic insecticide such Danadim Progress should be used. If soil temperatures remain below 5°C the activity of CYREN may be reduced.
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Apply in 200 to 1000 litres water per hectare.

### Directions

**For Use: 2. Maize**

- (†) Maximum individual dose: 1.5 litres per hectare
- (†) Latest time of application: 21 days before harvest

Pest	Rate per hectare	Timing of application
Frit fly	1.5 litres	Spray at first crop emergence or when crop has not more than 2 leaves.

Apply in 200 to 1000 litres water per hectare.

### Directions

**For Use: 3. Permanent Grassland, Rotational Grass, Amenity Grassland, Managed Amenity Turf**

- (†) Maximum individual dose: 1.5 litres per hectare
- (†) Maximum number of applications: 1 per annum
- (†) Latest time of application (pasture): 14 days before harvest

Pest	Rate per hectare	Timing of application
Frit fly	1.5 litres	Establishment and development of a young ley after an arable crop or direct reseeded may be affected by larvae attacking the central shoots of ryegrasses, fescues or bents. Application should be made at emergence where damage is anticipated or at first sign of attack.
Leatherjackets	1.5 litres	Over-winter feeding on old grassland or newly established swards results in damage becoming visible in the spring, the roots and stems are attacked at or below ground level and plants die off rapidly. CYREN may be applied from the beginning of November up to the end of March where high larval populations are detected or damage is first seen. Earlier treatment is more effective in reducing yield losses from over-winter feeding. Later applications may be made on golf courses. Applications during periods of prolonged frost is not recommended as Leatherjacket activity is reduced and treatment may not be effective. Lactating cows should not be grazed on treated pastures within 14 days of application.

Apply in 200 to 1000 litres water per hectare.

### Directions

**For Use: 4. Brassicas**

CYREN may be used on any of the following brassica crops: Broccoli, Cabbage, Calabrese, Cauliflower, Chinese Cabbage

- (†) Maximum individual dose: 2.0 litres per hectare

- (†) Maximum number of applications: Two per crop  
 (†) Latest time of application: 21 days before harvest

Pest	Rate per hectare	Timing of application
Aphids	1.0 litre	Spray when pests are first seen, usually early summer.
Caterpillars (small)	1.5 litres	Spray when damage is first seen.
Leatherjackets	1.5 litres	Apply pre-sowing.
White fly (adults)#	1.5 litres	Where used for aphid and caterpillar, CYREN will give some control of white fly.

Apply in 600 to 1000 litres water per hectare plus an authorised non-ionic wetter/spreader.

# *Non-organophosphorus resistant strains.*

### Control of Cabbage Root Fly

a) Drench treatment in the field (Broccoli, Cabbage, Calabrese, Cauliflower, Chinese cabbage)

- (†) Maximum individual dose: 70 millilitres of drench solution per plant or 5 litres of drench solution per 30 metres of row.  
 (†) Maximum concentration: Must not exceed 100ml of product per 100 litres of water  
 (†) Maximum number of applications: One per crop  
 (†) Latest time of application: 4 days after transplanting or at seedling emergence

Pest	Rate per 100 litres	Timing of application
Cabbage root fly	100 millilitres (†)	Treatment should be made within 4 days of transplanting or at seedling emergence for direct-sown crops after the third week of April.

Apply a drench of 70 millilitres to the base of each plant. A row treatment can be made by applying the dilute drench at 5 litres per 30 metres of row.

b) Drench treatment in peat blocks (Cabbage, Cauliflower, Calabrese, Brussels sprouts)

- (†) Maximum individual dose: 100 ml of product per 5000 blocks per 25 litres water  
 (†) Maximum concentration: For peat blocks containing cabbage, cauliflower, Brussels sprout and calabrese must not exceed 100 ml of product per 25 litres of water  
 (†) Maximum number of applications: One per crop prior to planting out  
 (†) Latest time of application: 4 leaf stage

Pest	Rate per 5000 blocks	Timing of application
Cabbage root fly	100 millilitres	Crops should be treated at the 4 leaf stage. Only good crops with good leaf condition that are growing vigorously should be treated. The leaves should be moistened with a light spray of water immediately before treatment. CYREN should then be applied at 100 ml per 5,000 blocks (43 x 43 x 43mm) in as dilute a solution as possible. This volume should be at least 25 litres per 5,000 blocks. Immediately after treatment, the spray should be washed off the leaves of the treated crops with water. The volume of water used should be sufficient to clear the leaves of spray deposit but not so much that CYREN is leached from the block. Any such leaching will reduce pest control and may also lead to soil contamination. Transplanting of treated blocks to a depth which brings untreated soil into contact with plant stems above the top of the block will lead to reduced control. Further treatments to control cabbage root fly larvae may be required in areas of high activity.

The drench volume should be determined by estimating the uptake of water by one block and then multiplying by 5,000 to calculate the volume for the 5,000 blocks to be treated.

c) Drench treatment in modules (Brussels sprouts, Cabbage, Cauliflower, Calabrese)

- (†) Maximum individual dose: 50 ml of product per 5000 modules
- (†) Maximum concentration: For modules containing cabbage, cauliflower, Brussels sprout and calabrese must not exceed 50 ml of product per 5 litres of water
- (†) Maximum number of applications: One per crop prior to planting out
- (†) Latest time of application: 4 leaf stage

The water volumes below are given as a guide for modules of 11 to 13 ml capacity (the minimum size and hence the minimum recommended). **HIGHER VOLUMES CAN BE USED WITH LARGER MODULES.**

Pest	Rate per 5000 plants	Timing of application
Cabbage root fly	50 millilitres in 5 litres water	<p>Crops should be treated at the 3 to 4 leaf stage. Only good crops with good leaf condition that are growing vigorously should be treated. The leaves should be moistened with a light spray of water immediately before treatment, 2 litres per 5000 plants, then the CYREN drench should be washed from leaves of plants with water (5 litres of clean water per 5000 plants)</p> <p>The total volume of water used in these three stages should not exceed the water holding capacity of the modules, otherwise leaching of the CYREN will occur which may reduce cabbage root fly control and lead to contamination of underlying glasshouse soil (see 'Notes' below)</p> <p>Modules should generally be transplanted as soon as possible after treatment. CYREN should be applied a few days beforehand if plants are to be despatched freshly watered to ensure no leaching occurs during the final watering. CYREN can be leached out of the compost in the first 24 hours after application after which it becomes strongly bound (adsorbed) onto the peat.</p> <p>Transplanting of treated modules to a depth which brings untreated soil into contact with plant stems above the top of the module will lead to reduced control. Further treatments to control cabbage root fly larvae may be required in areas of high activity</p>

NOTE: Peat blocks and modules:

(†) **SUITABLE RUBBER GLOVES AND COVERALLS MUST BE WORN** when handling recently drenched trays of plants.

CYREN should not be used to treat blocks or modules which will be planted out before the beginning of April.

Breakdown of CYREN in soils inside glasshouses can be very slow. Residues, even from one application of CYREN at the high concentrations used, can damage susceptible crops (e.g. lettuce, chinese leaves, chrysanthemums etc.) planted several months later. To avoid this do not apply CYREN in such a large volume of water that it passes through the compost.

Avoid spray contamination of pathways and covered areas surrounding the trays being treated. This can be achieved by using interceptor trays, polythene sheeting, correct water volumes etc. After use remove sheeting, wash down thoroughly and dispose of safely. Overdosing can result in transient yellowing of leaves, especially where high rates of wetting or composting agents have been used.

**Directions****For Use: 5. Sugarbeet**

- (†) Maximum individual dose: 1.5 litres per hectare  
 (†) Maximum number of applications: One per crop  
 (†) Latest time of application: End of July in year of harvest

Pest	Rate per hectare	Timing of application
Leatherjackets	1.5 litres	Where sugarbeet follows grass serious damage may result from feeding by Leatherjackets. Treatment of the Leatherjackets in grassland prior to cultivation and drilling of the sugarbeet crop as described in the 'Pasture' section is the recommended method of control. Follow up treatments of CYREN, or when prior treatment has not been possible, should be applied to the sugarbeet crop (first true leaves 10mm long) if high pest levels are found or at the first sign of damage by Leatherjackets. When prior treatment to the previous grass crop has not been possible, damage may be reduced rather than prevented. An interval of 4 days should elapse between applications of CYREN and any herbicide. <b>DO NOT TREAT CROPS UNDER STRESS.</b>
Pygmy Mangold Beetle	1.5 litres	A reduction in feeding damage cause by larvae and adult Pygmy Mangold Beetle may result from the treatment of sugar beet at the earliest recommended timing for control of Leatherjackets (first true leaves 10 mm long).

Apply in a minimum of 200 litres water per hectare.

**Directions****For Use: 6. Vegetables**

The following crops can be treated: Onions, Broccoli, Cabbage, Calabrese, Cauliflower, Chinese cabbage

- (†) Maximum individual dose: 2.0 litres per hectare  
 (†) Maximum number of applications: Broccoli, cabbage, calabrese, cauliflower, chinese cabbage: two per crop  
 Onions: One per crop  
 (†) Latest time of application: 21 days before harvest

Pest	Rate per hectare	Timing of application
Cutworms	2.0 litres	Most damage occurs in June and July when plants are either cut off at ground level by cutworm caterpillars which live in the surface layers of the soil or large holes eaten into the roots. Treat post-emergence when attack is forecast or when damage is first seen. <b>Note</b> – In common with many soil-applied pesticides the activity of CYREN may be reduced on organic soils.

Apply in 600 to 1000 litres water per hectare.

**Directions****For Use: 7. Apples**

- (†) Maximum individual dose: 1.0 litre per hectare (pre-blossom)  
 2.0 litres per hectare (post-blossom)  
 (†) Maximum number of applications: One per year pre-blossom

Three per year post-blossom

14 days before harvest

(†) Latest time of application:

(†) Fruit crops must not be treated during flowering

a) Pre-blossom applications

Pest	Rate per hectare	Timing of application
Apple blossom weevil	1.0 litre	Bud burst
Aphids	1.0 litre	Bud burst to pink bud. A further application may be required at petal fall or soon after to control rosy leaf-curling aphid and rosy apple aphid. In situations where there is a known history of rosy leaf-curling aphid, spray pre-blossom and again at petal fall.
Tortrix	1.0 litre	Bud burst to pink bud
Winter months	1.0 litre	Bud burst to pink bud
Apple sucker	1.0 litre	Green cluster to pink bud
Capsids,	1.0 litre	Green cluster to pink bud. A further application may be required at petal fall or soon after to control common green capsid

Apply in 250 to 2000 litres water per hectare.

b) Post-blossom applications

Pest	Rate per hectare	Timing of application
Aphids	2.0 litres	Petal fall. Following a pre-blossom treatment, extended control of Rosy leaf-curling aphid and Rosy apple aphid will be achieved by a further spray at petal fall or soon after. Apply in at least 1000 litres water per hectare to obtain penetration of curled leaf if no pre-blossom control applications had been made.
Common green capsid	2.0 litres	Petal fall
Sawfly	2.0 litres	Petal fall
Codling moth	2.0 litres	Mid to late June in most seasons. Repeat the application 14 days later and again if necessary
Late Winter moths	2.0 litres	Mid to late June in most seasons. Repeat the application 14 days later and again if necessary
Red spider mites #	2.0 litres	Where CYREN is used at petal fall for Capsid, Late winter moth or Sawfly control, or later where it is used for Codling or Tortrix moth control it may not be necessary to use an acaricide treatment.
Tortrix	2.0 litres	This pest will be controlled by applications for Codling moth. A third application may be required where severe or late attacks occur in late July or August.
Woolly aphid	2.0 litres	This pest will also be controlled by the Codling and Tortrix spray applications.

Apply in 250 to 2000 litres water per hectare.

# *Non-organophosphorus resistant strains.*

**Directions**

**For Use: 8. Pears**

(†) Maximum individual dose: 2.0 litres per hectare

(†) Maximum number of applications: Two per year

(†) Latest time of application: 14 days before harvest

(†) Fruit crops must not be treated during flowering

a) Pre-blossom applications

Pest	Rate per hectare	Timing of application
Aphids	1.0 litre	Bud burst to white bud
Capsids	1.0 litre	Bud burst to white bud
Tortrix	1.0 litre	Bud burst to white bud
Winter moths	1.0 litre	Bud burst to white bud

Apply in 250 to 2000 litres water per hectare.

b) Post-blossom applications

Pest	Rate per hectare	Timing of application
Capsids	2.0 litres	Spray when pests are seen
Caterpillars,	2.0 litres	Spray when pests are seen
Pear sucker	2.0 litres	Spray when pests are seen. Good coverage is essential and it is advisable to spray high volume and thoroughly soak the trees. Strains of Pear sucker resistant to organophosphates and pyrethroids are known to exist. In these circumstances control of the pest will be reduced. (See Note below)
Aphids	2.0 litres	Post-blossom sprays will control aphids including Leaf-curling aphids
Codling moth	2.0 litres	Mid to late June in most seasons. Repeat the application 14 days later and again if necessary.
Red spider mites #	2.0 litres	Post-blossom applications may control this pest.

Apply in 250 to 2000 litres water per hectare

# *Non-organophosphorus resistant strains.*

Note: Pear suckers resistant to one or more groups of insecticides are widespread. Where strains resistant to organophosphorus insecticides occur, Cyren is unlikely to give satisfactory control. Where repeat treatments are needed, use different active ingredients.

**Directions**

**For Use: 9. Plums**

- (†) Maximum individual dose: 2.0 litres per hectare  
(†) Maximum number of applications: Three per year  
(†) Latest time of application: 14 days before harvest

(†) Fruit crops must not be treated during flowering

a) Pre-blossom applications

Pest	Rate per hectare	Timing of application
Aphids	1.0 litre	Bud burst to white bud
Tortrix	1.0 litre	Bud burst to white bud
Winter moths	1.0 litre	Bud burst to white bud

Apply in 250 to 2000 litres water per hectare.

b) Post-blossom applications

Pest	Rate per hectare	Timing of application
Damson hop aphids #	2.0 litres	Spray in May or June when aphids are first seen and repeat as necessary for further aphid migrations into orchards.

Mealy plum aphid	2.0 litres	Spray in May or June when aphids are first seen and repeat as necessary for further aphid migrations into orchards.
Winter moths	2.0 litres	Spray at cot split (7 to 10 days after petal fall).
Red spider mites #	2.0 litres	Where CYREN is used at cot split to control late Winter moths it may not be necessary to use an acaricide treatment

Apply in 250 to 2000 litres water per hectare.

# *Non-organophosphorus resistant strains.*

### Directions

**For Use: 10. Strawberries**

- (†) Maximum individual dose: 1.5 litres per hectare
- (†) Maximum number of applications: Two per crop at 1.5 litres/ha (control of Blossom weevil/red spider mite)  
One per crop at 1.0 litre/ha (control of aphids or Tortrix)
- (†) Latest time of application: 7 days before harvest
- (†) Fruit crops must not be treated during flowering

Pests	Rate per hectare	Timing of application
Aphids	1.0 litre	<i>Fruiting beds.</i> Spray just before flowering and before the aphids build up (usually in mid to late April for outdoor crops). Repeat immediately after the fruit has been picked. For early attacks it may be necessary to apply the first spray in late March. Repeat in late April to early May. <i>Protected Crops.</i> Spray in March and again, if necessary just before flowering. <i>Runner Beds/Maiden Beds.</i> Spray in mid-May and repeat at 2 to 3 week intervals
Tortrix	1.0 litre	Spray in April, when pest appears. This pest can cause serious damage in some seasons and it may be necessary to spray again in the summer and autumn
Red spider mites #	1.5 litres	Application of CYREN at the time for aphids will also control non-organophosphorus resistant red spider mite. In some seasons a spray in early April may prove necessary. Spray protected crops in early March to early April
Strawberry blossom weevil	1.5 litres	Where infestations are not severe, application should be made after the first sign of damage up until just before the crop flowering stage. Where infestations are severe two applications should be made: the first at the first sign on weevil damage and the second just before the crop flowering stage.

Apply in 1000 litres water per hectare.

# *Non-organophosphorus resistant strains.*

### Directions

**For Use: 11. Outdoor Strawberries**

- (†) Maximum individual dose: 570 ml of spray solution per plant
- (†) Maximum number of applications: One per crop
- (†) Maximum concentration: Must not exceed 2.0 litres of product per 1000 litres of water
- (†) Fruit crops must not be treated during flowering

CYREN must only be applied as a drench treatment to strawberries at the end of the cropping season but before the end of November.

Pest	Rate / 1000 litres	Timing of application
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Vine weevil	2.0 litres	Weevils damage the main feeding roots and may excavate the base of the crown. Drench strawberry crowns and surrounding collar of soil after cropping and preferably after mowing. CYREN is also recommended for the control of vine weevil larvae in later cropping varieties of strawberry, e.g. Ostara and Rapella, and also in the late crop of a double cropping variety such as Red Gauntlet. Application must be made as above, after the top growth has been mown off following cropping, but no later than November. Do not apply CYREN for the control of vine weevil larvae to strawberries grown under plastic tunnels or in cloches.
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Apply as a drench using 285 to 570 millilitres solution per plant depending on size.

### Directions

#### For Use: 12. Raspberries

- (†) Maximum individual dose: 1.5 litres per hectare
- (†) Maximum total dose: 3.0 litres/ha
- (†) Maximum number of applications: Three per year
- (†) Latest time of application: 7 days before harvest

(†) Fruit crops must not be treated during flowering

Pest	Rate per hectare	Timing of application
Raspberry beetle	1.0 litre	Spray at first pink fruit stage
Aphids	1.0 litre	Spray pre-blossom as required
Red spider mites #	1.5 litres	Attacks at first pink stage will be controlled by sprays applied for raspberry beetle control or spray later as required
Raspberry cane midge	1.0 litres	<i>Southern England:</i> Early/mid-May <i>Scotland:</i> Late May/early June. Spray one week later in both areas after a cold spring. Delay first application until small longitudinal splits are found on the young spawn or on ADAS advice. Repeat 10 to 14 days later just before but not during flowering. Direct spray into bottom 600 millimetres of young canes i.e. below bottom wire.

Apply in a minimum of 1000 litres water per hectare for control of raspberry beetle; 500 litres water per hectare for other pests.

# *Non-organophosphorus resistant strains.*

### Directions

#### For Use: 13. Gooseberries

- (†) Maximum individual dose: 1.5 litres per hectare
- (†) Maximum number of treatments: One per year
- (†) Latest time of application: 14 days before harvest

(†) Fruit crops must not be treated during flowering

Pest	Rate per hectare	Timing of application
Aphids	1.0 litre	Spray as and when attack occurs
Capsids	1.0 litre	Spray before first flower open and again at the end of flowering
Caterpillars	1.0 litre	Spray as soon as the pests are seen, usually soon after fruit set. It is important to force the wash into the centre of large bushes

Red spider mites #	1.5 litres	Spray as soon as mites are seen on the foliage, usually late April to early May, and repeat application if necessary
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Apply in a minimum of 2000 litres of water per hectare for control of red spider mite; 1000 litres water per hectare for other pests

# *Non-organophosphorus resistant strains.*

### Directions

**For Use: 14. Currants**

The following crops may be treated: Blackcurrants, Redcurrants, Whitecurrants

- (†) Maximum individual dose: 1.5 litres per hectare
- (†) Maximum number of application: Three per crop
- (†) Latest time of application: 14 days before harvest

(†) Fruit crops must not be treated during flowering

Pest	Rate per hectare	Timing of application
Aphids	1.0 litre	Spray as and when attack occurs
Capsids	1.0 litre	Spray before first flower open and again at the end of flowering
Caterpillars	1.0 litre	Spray before first flower open and again at the end of flowering
Red spider mites #	1.5 litres	Spray at fruit set and repeat if necessary. Repeat after picking to avoid spider mite hibernating for next season.

Apply in a minimum of 2000 litres water per hectare for control of red spider mite; 1000 litres water per hectare for other pests.

# *Non-organophosphorus resistant strains.*

### Compatibility:

Do not mix Cyren with highly alkaline materials. Up-to-date compatibility information may be found at [www.headland-ag.co.uk](http://www.headland-ag.co.uk) or from your distributor.

### Cautions:

1. Application: Do not spray in cold, windy conditions.
2. Soil Types: As with many soil applied pesticides reduced activity may occur when CYREN is applied to organic soils.
3. Resistance:
  - 3.1 Aphids: strains of some aphid species are resistant to many aphicides. Where aphids resistant to chlorpyrifos occur, Cyren is unlikely to give satisfactory control. Repeat applications of the same product are unlikely to improve effectiveness.
  - 3.2 Spider mites: strains of spider mites resistant to one or more groups of acaricides are widespread. Where strains resistant to chlorpyrifos occur, Cyren is unlikely to give satisfactory control.
  - 3.3: Pear suckers resistant to one or more groups of insecticides are widespread. Where strains resistant to Organophosphorus insecticides occur, Cyren is unlikely to give satisfactory control. Where repeat treatments are needed, use different active ingredients.

1. Safety to bees: In fruit crops, apply pre-blossom up to pink/white bud or post-blossom after petal fall. In other crops, do not apply during flowering.

## **Safety Precautions:**

### **a. Operator Protection**

Chlorpyrifos is an anticholinesterase organophosphorus compound.

**DO NOT USE** if under medical advice **NOT** to work with such compounds.

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

**WEAR SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACE-SHIELD)** when handling the concentrate.

**WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES** when handling drenched trays or peat blocks/modules of seedlings.

**WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES** when handling freshly treated material.

However, engineering controls may replace personal protective equipment if a CoSHH assessment shows they provide an equal or higher standard of protection.

**WHEN USING DO NOT EAT, DRINK OR SMOKE.**

**WASH CONCENTRATE** from skin or eyes immediately.

**DO NOT BREATHE SPRAY.**

**WASH HANDS AND EXPOSED SKIN** before meals and after work.

**IF YOU FEEL UNWELL**, seek medical advice, (show label where possible).

**IF SWALLOWED, DO NOT INDUCE VOMITING:** seek medical advice immediately and show this container or label.

### **b. Environmental Protection**

**HIGH RISK TO BEES.** Do not apply to crops in flower or to those in which bees are actively foraging. Do not apply when flowering weeds are present.

**KEEP LIVESTOCK OUT** of treated areas for at least 14 days after treatment

**EXTREMELY DANGEROUS TO FISH OR OTHER AQUATIC LIFE.** Do not contaminate surface waters or ditches with chemical or used container.

**DO NOT ALLOW DIRECT SPRAY** from broadcast air-assisted sprayers to fall within 18m of the top of the bank of a static or flowing waterbody, unless a Local Environmental Risk Assessment (LERAP) permits a narrower buffer zone, or within 5m of the top of a ditch which is dry at the time of application. Aim spray away from water.

**DO NOT ALLOW DIRECT SPRAY** from horizontal boom sprayers to fall within 5m of the top of the bank of a static or flowing waterbody, or within 1m of the top of a ditch which is dry at the time of application. **DO NOT ALLOW DIRECT SPRAY** from hand-held sprayers to fall within 1m of the top of the bank of a static or flowing waterbody. Direct spray away from water. **THIS PRODUCT IS NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP HORIZONTAL BOOM SPRAYERS SCHEME.**

Buffer zones must be measured in accordance with the guidance set out in PSD's booklet 'Local Environmental Risk Assessments for Pesticides – A Practical Guide', available from MAFF Publications, Admail 6000, London. SW1A 2XX, Tel 0645 556000 (and any amendments that are made to it)

### **c. Storage and Disposal**

**KEEP OUT OF REACH OF CHILDREN**

**KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.**

**KEEP IN ORIGINAL CONTAINER**, tightly closed, in a safe place.

**WASH OUT CONTAINER THOROUGHLY**, empty washings into spray tank, and dispose of safely.

**DO NOT RE-USE THIS CONTAINER** for any purpose.

## **Medical Advice:**

### Symptoms of poisoning:

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

### First aid:

If any of the above symptoms occur, particularly if there is known contamination:

**STOP WORK.**

Remove contaminated clothing. Wash exposed skin and hair.

Prevent all exertion.

Call doctor AT ONCE and show him this leaflet.

### Guide to Doctors:

CYREN contains an anticholinesterase organophosphorus insecticide, chlorpyrifos.

### Specific treatment:

1. In all cases and as early as possible inject atropine sulphate 2 mg or pro rata for children and repeat (if necessary) until fully atropinised.
2. IF AVAILABLE administer pralidoxime 1 gramme by intra-muscular injection. Repeat after 3-4 hours.

### Other measures:

1. Keep airway clear.
2. Watch respiration – intubation with endotracheal tube, or tracheotomy may be necessary in conjunction with artificial ventilation.
3. Put patient at complete rest in hospital for 24 hours at least.

### Confirmation of diagnosis:

By estimating cholinesterase activity (5ml blood, unhaemolysed, collected in an anticoagulant).

Further advice may be obtained from the nearest National Poisons Information Centre: 0870 600 6266

## **IMPORTANT INFORMATION**

Crops:	see Directions for Use
Maximum Individual Dose:	see Directions for Use marked (†)
Maximum Number of Treatments:	see Directions for Use marked (†)
Latest Time of Application:	see Directions for Use marked (†)
Other Specific Restrictions:	see Directions for Use marked (†)

### **Regulatory**

**Information:** The Chemical (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP3) apply to this product.

Hazard Symbols:	Harmful Xn Dangerous for the Environment N
Risk Phrases:	R20/22 Harmful by inhalation and if swallowed R38 Irritating to skin R50 Very toxic to aquatic organisms R53 May cause long-term adverse effects in the aquatic environment R65 Harmful – may cause lung damage if swallowed
Safety Phrases:	S2 Keep out of reach of children S24 Avoid contact with skin

- S46 If swallowed seek medical advice immediately and show the container label.
- S60 This material and its container must be disposed of as hazardous waste.
- S61 Avoid release into the environment. Refer to special instructions / safety data sheets.

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

The (CoSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

Product Registration Number: MAPP 11028

LERAP Category - A

To avoid risks to man and the environment, comply with the instructions for use.

Note: Specific Off-label Approvals (SOLAs) have been issued for this product. For details see the Chemicals Regulation Directorate web-site ([www.pesticides.gov.uk](http://www.pesticides.gov.uk)).

**Transport** This product is classified as hazardous for transport

Road Transport:	Hazardous liquid
UN Number:	3018
Proper Shipping Name:	Organophosphorus pesticide, liquid, toxic. NOS (contains chlorpyrifos 45% w/w)
UN Class	6.1
CPL Packing Group:	3
ADR/RID Description:	Toxic
IMDG Code:	Marine pollutant

Date of latest revision: January 2010

Significant changes since last issue: Deletion of recommendations for use in forestry. Changes to compatibility advice.