

Pyrifen

Reg. No.: L 11497 Act /Wet No. 36 of/van 1947

An Emulsifiable concentrate insecticide for the control of disease as indicated on crops.

ACTIVE INGREDIENT

Pyriproxyfen 100 g/l

IRAC INSECTICIDE GROUP CODE

7C



WARNING

HAZARD STATEMENTS: Harmful if inhaled | Suspected of damaging fertility or the unborn child | Very toxic to the aquatic life.

PRECAUTIONARY STATEMENTS: Avoid breathing mist or spray | Wear protective gloves, protective clothing, eye protection and face protection | Wash thoroughly after handling | Obtain special instructions before use.

Registration holder: Green Island Investments (Pty) Ltd.

Co. Reg. No.: 2013/043963/07

P.O. Box 1822, Heidelberg 1438, South Africa

Tel: 078 737 9236

24 HR EMERGENCY NUMBERS

Griffon Poison Information Centre: +27 82 446 8946

24 Hr Transport / Spill emergency no:

(Hazcall24) +27 86 044 4411 (Typhoon Plant Protection)

Distributed by: Typhoon Plant Protection (Pty) Ltd.

Co. Reg. No.: 1998/006156/07, C/O Farm Vlakfontein

Corner of the R23 Benoni Road & R550 Nigel Road

Brakpan District, Heidelberg 1438, Gauteng, South Africa

Tel: 078 737 9236

Net Volume:

ℓ

Expiry Date:

Batch No:

Date of Manufacture:

U.N. No. 1993

 **Typhoon**
PLANT PROTECTION

READ LABEL IN DETAIL BEFORE OPENING THE CONTAINER. FOR FULL PARTICULARS, SEE ENCLOSED LEAFLET.
KEEP OUT OF REACH OF CHILDREN AND ANIMALS.



WARNINGS:**Withholding periods:**

Allow the following number of days between the last application and harvest:	
Citrus:	45 days
Mangoes:	60 days

NOTE: The maximum residue levels (mrl's) will not be exceeded provided applications are applied as prescribed. When production is destined for the export market, the export agency of concern must be contacted, prior to the use of pyriproxyfen 100ec in a spray programme..

HAZARD STATEMENTS:

- Harmful if inhaled.
- Suspected of damaging fertility or the unborn child.
- Very toxic to the aquatic life.
- Harmful if swallowed, inhaled or absorbed through skin.
- May cause irritation to eyes, skin, nose and throat.
- Very toxic to fish and other aquatic organisms.
- **FLAMMABLE - do not** store near open flame.
- Store under lock and key in a cool, dry place and away from food, feeds and seed.
- Keep out of reach of children, uninformed persons and animals.
- **Re-entry: Do not** enter treated area within 1 day after treatment, unless wearing protective clothing.
- **In case of poisoning call a doctor and make the label available to him/her.**

Although this remedy has been extensively tested under a large variety of conditions the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal climatic and storage conditions; quality of dilution water, incompatibility with other substances not indicated on the label and the occurrence of resistance of the pests to the remedy concerned as well as by the method, time and accuracy of application. The registration holder further does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in event of any uncertainty.

PRECAUTIONS:**PRECAUTIONARY STATEMENTS:**

- Avoid breathing mist or spray.
- Wear protective gloves, protective clothing, eye protection and face protection.
- Wash thoroughly after handling.
- Obtain special instructions before use.

- **Do not** inhale fumes or spray mist.
- Avoid skin and eye contact.
- Wear protective clothing, overalls, face shield, rubber gloves and rubber boots when handling and mixing the product.
- Wash with soap and water after use and accidental skin contact.
- Wash contaminated clothing after use.
- **Do not** eat, drink or smoke while mixing or applying the product or before washing hands and face and changing clothing.
- Avoid drift of spray onto other crops, grazing, rivers, dams and areas not under treatment.
- Clean application equipment after use. Dispose of wash water where it will not contaminate crops, grazing, rivers, dams and boreholes.
- Triple rinse empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter, rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the container in the described manner.
- Destroy the empty container by perforation and flattening and dispose of it in a safe manner.
- **Never** re-use the empty container for any other purpose.
- Prevent contamination of food, feeds, drinking water and eating utensils.

SYMPTOMS OF HUMAN POISONING:

If swallowed and aspirated into the lungs, chemical pneumonia can occur.

May cause irritation of skin, eyes, nose and throat.

Related ingredients:

Chemical name	CAS - No.	Concentration % By weight
Pyriproxyfen	95737-68-1	11.23
Ingredients withheld as a Trade Secret	Various CAS No.'s	88.77

FIRST AID TREATMENT:

- The airway should be kept clear to maintain respiration. First aid treatment should be performed by qualified medical personnel and should include, if necessary, mouth-to-nose respiration and cardiac massage.
- **Inhalation:** Immediately remove source of contamination or move the patient to fresh air. Keep the patient warm and at rest. **Obtain medical advice immediately.**
- **Skin contact:** Remove contaminated clothing, shoes and leather goods immediately. Wash skin gently and thoroughly with clean water and non-abrasive soap until no evidence of chemical remains. **Obtain medical advice immediately.**
- **Eye contact:** Flush eyes immediately with large amounts of gently flowing, cold water, occasionally lifting upper and lower lids, for at least 15 to 20 minutes until no evidence of chemical remains. Obtain medical advice.
- **Ingestion:** **Do not** induce vomiting, due to aromatic solvent present in product. **Obtain medical advice immediately** and make the container, or label or Data Sheet available.

- **Never** give anything by mouth to a semi-conscious or unconscious person. If vomiting occurs, take care to prevent vomit from being inhaled. Establish and maintain airway. If necessary, treat respiratory difficulty by performing mouth-to-nose respiration or administer oxygen.

ADVICE TO PHYSICIAN:

This product contains an aromatic solvent. If product is aspirated into the lungs during ingestion or vomiting, mild to severe chemical pneumonia may be caused.

No specific antidote is available. Treat symptomatically and supportively as required. If the product is swallowed, careful gastric lavage may be considered.

RESISTANCE WARNING:

For resistance management, **PYRIFEN** is a **group code 7C insecticide**. Any insect population may contain individuals naturally resistant to **PYRIFEN** and other **group code 7C insecticides**. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **PYRIFEN** or any other **group code 7C insecticide**.

To delay insecticide resistance:

- Avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank-mix with products from different insecticide group codes,
- Integrate other control methods (chemical, cultural, biological) into insect control programmes.

For specific information on resistance management contact the registration holder of this product.

USE RESTRICTIONS:

- Thorough spray coverage of the tree with **PYRIFEN** is very important because effective control is dependent on scale crawlers coming into contact with residues of the product where ever they may move or settle on the tree.
- It is highly desirable to use this treatment in conjunction with good ant control.
- When a registered medium mineral oil is added to **PYRIFEN** in citrus may it have a variable detrimental impact on yield and colouring when applied as indicated. To minimize this possibility, restrict application to healthy, well irrigated orchards and **do not** spray if the temperature is above 30 °C.

THE RELEASE OF BIOLOGICAL CONTROL AGENTS:

- The hymenopterous scale parasitoids, *Aphytis holoxanthus* and *Aphytis lingnanensis* can be released in orchards immediately following treatment with **PYRIFEN**.
- The coccinellid mealybug predator, *Cryptolaemus montrouzieri* can be released into an orchard, 45 days after application of **PYRIFEN** in such an orchard.

DIRECTIONS FOR USE: Use only as directed.

Compatibility:

- **PYRIFEN** is compatible with Medium mineral Oil and benomyl.
- When **PYRIFEN** is used in conjunction with any other agricultural remedy, all **WARNINGS, PRECAUTIONS** and **DIRECTIONS FOR USE** mentioned on that label, must be adhered to.

Mixing Instructions:

- Half fill the spray tank with clean water.
- Measure out the required quantity of **PYRIFEN** and add to the spray tank while agitating.
- While filling the spray tank with clean water to the required level, add as well the required quantity of oil (when needed).
- Maintaining agitation to ensure thorough mixing.
- Maintain agitation during spraying.
- Use the prepared mixture immediately and must not be left overnight in the spray tank.
- Ensure that agitation takes place for a few minutes prior to commencement of spraying after normal operational stops, e.g. after lunch break.

Application Instructions:

- Apply as a full cover spray, using suitable application machinery.
- Ensure that all above-ground parts of the tree are thoroughly wetted with spray mixture.
- Ensure thorough wetting of the tree tops.
- The number of **PYRIFEN** containing treatments required to prevent citrus red scale movement to fruit in particular orchards, will vary according to the prevailing scale density.
- This density can be ascertained with the aid of regular orchard inspection and analysis of scale cull at harvest the previous year.
- Two general infestation levels and relevant **PYRIFEN** treatments are defined for practical use.

APPLICATION DOSAGE RATES:

SITUATION:	DOSAGE RATE:	REMARKS:
CITRUS: Red scale control: Mpumalanga Lowveld, Limpopo, North West Province & Northern Cape: A. Red scale under commercial control.		
1. Multiple applications: (Preventative)	1st Spray: 30 mℓ PLUS 300 mℓ Medium mineral Oil /100 ℓ water	In this situation there would have been negligible scale on fruit the previous summer and at harvest, and live scale will be difficult to find on the tree framework.
	2nd Spray: 30 mℓ PLUS 200 mℓ Medium mineral Oil /100 ℓ water	Apply as a full cover spray as soon as the first crawler movement is noticed, typically at bud burst, but not earlier than 15 August.
		Apply as a full cover spray at 80 to 100 % petal drop or shortly thereafter; 5 to 8 weeks after the first spray.
OR 2. Single application: (Maintenance)	OR 30 mℓ PLUS 200 mℓ Medium mineral Oil /100 ℓ water	This single application can only be used following a season during which multiple applications of PYRIFEN were made, resulting in a commercial clean orchard. Apply as a full cover spray at 80 to 100 % petal drop or shortly thereafter. This application should only be used where no harsh thripicides are included in the spray programme. These orchards must be carefully scouted and treated with oil in the summer is necessary.

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B. Red scale not under commercial control.

Apply 3 sprays.	1st Spray: 30 ml PLUS 300 ml Medium mineral Oil /100 l water	In this situation scale density levels can vary from moderate infestation on framework and crop, to infestations where trees are in a state of terminal decline. Apply as a full cover spray as soon as the first crawler movement is noticed, typically at bud burst, but not earlier than 15 August.
	2nd Spray: 30 ml PLUS 200 ml Medium mineral Oil /100 l water	Apply as a full cover spray at 80 to 100% petal drop or shortly thereafter.
	3rd Spray: 30 ml PLUS 300 ml Medium mineral Oil /100 l water	Apply as a full cover spray, late November or December. This application can be combined with the benomyl application for black spot control. If this combination is used then 500 ml medium mineral oil must be used as per benomyl registration.

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SITUATION:	DOSAGE RATE:	REMARKS:
CITRUS: Red scale control: Eastern Cape and Western Cape:		
A. Red scale under commercial control.		
Multiple applications: 1. PYRIFEN followed by PYRIFEN	1st Spray: 30 ml PLUS 200 ml Medium mineral Oil /100 l water	In this situation there would have been negligible scale on fruit the previous summer and at harvest, and live scale will be difficult to find on the tree framework. Apply as a full cover spray or as soon as the first crawler movement is noticed, typically at 80 to 100 % petal drop, or shortly thereafter.
	2nd Spray: 30 ml PLUS 500 ml Medium mineral Oil /100 l water	Apply as a full cover spray at December or early in January, 5 to 8 weeks after the first spray.
OR 2. Single application: (Maintenance)	OR 30 ml PLUS 200 ml Medium mineral Oil /100 l water	This single application can only be used following a season during which multiple applications of PYRIFEN were made, resulting in a commercial clean orchard. Apply as a full cover spray at 80 to 100 % petal drop or shortly thereafter.
		This application should only be used where no harsh thripicides are included in the spray programme. These orchards must be carefully scouted and treated with oil in the summer is necessary.
Mangoes Mango scale (<i>Aulacaspis tubercularis</i>)	50 ml/100 l water	Apply as a single full cover application after flowering, in October.