

Mode of Action

Polytrin® P contains two components:

- Profenofos "Q": This is the more purified profenofos molecule with a distinctly less smell than other profenofos molecules, is a non-systemic insecticide with contact and stomach action. It has ovicidal action on lepidopterous eggs (Heliothis and others). It easily penetrates foliar tissue and kills all sucking insects on the untreated side of the leaves (translaminar effect)
- Cypermethrin: A non-systemic insecticide with strong contact action, rapid knock-down effect and excellent residual activity. It has repellent effect on flying moths.

Spectrum of Activity

Polytrin[®] P is a broad spectrum insecticide. Both components, though chemically different, are especially active on caterpillars. In addition, profenofos provides some control of non-resistant aphids, spider mites and other sucking pests. In cotton it is recommended for the complete control of the pest complex including sucking insects and spider mites.

Cucurbits, Tomatoes

Typical pests:

- Leaf feeding caterpillars (Mamestra, Plutella, Heliothis, Keiferia, etc.)
- Sucking insects (aphids, bugs, jassids, thrips, white flies)
- Mites (Tetranychus)

<u>Cotton</u> Bollworms

Heliothis sp - A Earias sp - Sp Diparopsis sp - R

Pectinophora sp

- American bollworm - Spiny bollworm - Red bollworm - Pink bollworm

Cryptophlebia sp - False codling moth Leaf-eaters (leafworms)

Spodoptera sp - leafworms Xanthodes graellsii - Sudan leafworm Trichoplusia ni - Cabbage looper Cosmophila sp - Cotton looper

Sucking insects

Aphis gossyipii - Cotton aphid Thrips sp - thrips Empoasca sp - Cotton jassids Bemisia tabaci - whiteflies Helopeltis sp - Helopeltis bug Lygus sp - Capsid Dysdercus sp - Cotton stainer
Calidea dregii - blue cotton bug
Spider mites
Tetranychus sp - red spider mite
Tarsonemid sp - broad mite

DIRECTIONS FOR USE

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

<u>Dosage</u>

The recommended dosage rate is 1.0 - 1.5 litres per ha (0.4 - 0.6 lt./acre). Cotton:

Apply 100 ml - 150 ml per 20 litres of water - one knapsack sprayer - at least minimum of 200 lt./ha.

Cucurbits, Cotton

Apply 30 ml per 15-litre knapsack (500 litres water/ha). For dense foliage use 25 ml per 15-litre knapsack (at least 600 litres of water per hectare). Apply 40 ml per 20 litre-knapsack (500 litres of water per ha). For dense foliage apply 30 ml per 20-litre knapsack sprayer (600 litres of water per hectare).

Timing: Start treatment when the locally established economic injury level is reached or at first signs of sucking pest infestation; repeat as necessary. In general, small larvae are easier to control than older ones. Optionally apply at set intervals or on increasing infestation levels (according to egg and larvae counts). Apply as a protective spray program on a 14 day schedule. Spray early morning to mid morning and late evening.

Note

- Wet the whole plant thoroughly but avoid run-off and spray drift to non-target sites. Treat only when there is little wind or no wind.
- Do not spray during the hot hours of the day, if the foliage is wet or if rain is imminent.
- Do not overdose by overlapping applications or by exceeding the recommended rate.

Compatibility: Polytrin[®] P should not be mixed with other insecticides. **Crop tolerance:** When used as recommended, Polytrin[®] P is well tolerated by all vegetable crops and cotton. In case of doubt check crop tolerance first.

Integrated Pest Management

Monitor beneficials and pests and use local thresholds. If several treatments are required against the same pest, alternate products with different modes of action.

Equipment and Spray volume: Field crops: - ground application: Tractor sprayers with boom and nozzles, knapsack sprayers and motorised mistblowers are recommended. Use at least 200 lt./ha of water; thorough coverage of dense foliage requires 500 lt./ha. For aerial application use 20-30 litres spray mixture per hectare (8-12 lt./acre). Make sure the equipment is properly calibrated to give even distribution at the correct volume. Wash all equipment thoroughly after use.

Mixing

Add the measured quantity of concentrate to clean water in the half filled spray tank. Maintain agitation while topping up. Always stir the spray mixture well and apply within a few hours. Do not pre-mix in bulk. Mix each spray batch freshly.

Pre-Harvest interval

<u>Crop</u>	<u>Days</u>
Tomato, Cucurbits	7
Cotton	14

Operator Safety

Polytrin® P is harmful upon ingestion, skin absorption and inhalation. Avoid any contact with skin, eyes and clothing. Do not breath spray mist. Prolonged or repeated exposure to spray mist may be harmful. Do not eat, drink or smoke during work; wash hands and face thoroughly first. Wear protective clothing, i.e., overalls, face shield, gloves, gumboots, etc., when handling the product. Change contaminated clothing immediately and wash before re-use. After work change clothes and wash hands and exposed parts of body thoroughly with soap and water.

Storage: Store in original tightly closed containers away from sun and damp in a well-ventilated place away from food and feed under lock and key. Avoid storage above 35⁰C. Keep out of reach of children, unauthorized persons and animals.

Product and Container Disposal

Dispose of surplus product on a landfill site approved for pesticides or bury in a safe place away from water supplies. Dilute surplus application mixture and pour it broadcast on fallow land. Empty metal containers are to be flattened, perforated and disposed of on a landfill site or buried in a safe place. Dispose of plastic containers on a landfill site or burn at a safe place. For drums take re-cycling in account, otherwise crush and bury. Do not re-use empty containers for any other purpose, especially not for storing drinking water, food or feed.

Spillage and Leakage

Remove heavily contaminated soil layer and bury at a safe place away from water supplies. Spillages: Soak up with sand, sawdust, soil or an oil binding agent. Collect up the contaminated material thoroughly and bury in a safe place or put in a waste

bin or plastic bag, mark and dispose of on a landfill site approved for pesticides. Treat spill areas with plenty of water. Spilt product should not be re-used.

Environment and wildlife

Dangerous to bees. Do not apply when bees are actively foraging in the area. Application should be timed to give the maximum possible interval between treatment and the next period of bee activity. Dangerous to fish. Do not contaminate water areas (e.g. ponds, lakes, ditches, waterways, etc.). Birds feeding on treated area may be affected. Keep all livestock out of freshly treated area.

FIRST AID INSTRUCTIONS

If poisoning is suspected, stop work immediately and call a physician. Keep the patient in a well-ventilated area and strip off contaminated clothing. Wash contaminated skin with soap and water, eyes with plenty of clean water. If the substance has been ingested, induce vomiting, provided the patient is conscious. Do not administer anything by mouth to an unconscious person.

Note to the physician: Inject intravenously 2-4 mg (adults) atropine sulphate. Repeat at 5-10 min. intervals until signs of atropinization appear. The patient should be atropinized for 24-48 hours because of continued possible absorption of the poison. If applied not later than 6 hours, the additional injection of the oxime preparation may be useful.

TOXICOLOGICAL INFORMATION

Polytrin[®] P is harmful upon ingestion, skin absorption and inhalation. It contains profenofos, a cholinesterase inhibitor.

Poisoning symptoms

Cholinergic overexcitation due to inhibition of cholinesterase activity. Under laboratory conditions the following symptoms were observed in rats: dysponea, exopthalmus, curved posture, tonic-clonic muscle spasm and ruffled fur.

WHO Class: II (moderately hazardous)

Antidote: Atropine, in addition oxime preparations, preferably TOXOGONIN, under medical supervision.

Notice to User

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use or store a pest control product under unsafe conditions.

User's Risk

Seller's guarantee is limited to the terms set out on the label and subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

Before using this product, please read the attached product label and accompanying leaflet.

Use pesticides safely.

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