

## ACTARA® is a new broad-spectrum insecticide for foliar and soil use to control sucking and some chewing insects in tomatoes, lettuce, salads, brassicas (cabbage, kales, etc), cucurbits, green beans, peas, okra, pepper, ornamentals and flowers.

## Mode of Action

ACTARA<sup>®</sup> is recommended for the control of sucking and some chewing

insects in vegetables and ornamentals. ACTARA<sup>®</sup> displays root-, leafand stem-systemic activity. In target insects it shows quick stomach and contact action. Symptoms start 15 to 30 minutes after uptake in aphids and after 1 hour in whiteflies. Feeding is stopped, the sucking insect withdraws their stylets, stretch their legs and move the antennae forward. ACTARA<sup>®</sup> is considered to act by interfering with the nicotinic acetyl choline receptor of the nervous system.

#### Spectrum of Activity

ACTARA<sup>®</sup> is highly active against sucking insects (e.g. aphids, leafhoppers, whiteflies).

# Crop Tolerance

In general, crop tolerance is not affected by foliar or soil applications of ACTARA<sup>®</sup>. In case of sensitive or new varieties check crop tolerance first.

#### Resistance (Insect Resistance Management)

For foliar applications not more than one or two sprays per season are recommended. If seeds have been treated with thiamethoxam the first foliar or systemic application (e.g. into irrigation water) should be done with products of another chemical class.

#### **IPM-Fitness**

Monitor beneficial fauna and pest and use local thresholds. If several treatments are required against the same pest, alternate with products with different modes of action. For whitefly control it is recommended to alternate ACTARA<sup>®</sup> with PEGASUS<sup>®</sup>.

Do not apply when bees are actively foraging.

#### **Recommendations for use**

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

In a 20 litre knapsack use 8 g ACTARA<sup>®</sup> (fill the cap of the ACTARA<sup>®</sup> pack to level evenly).

#### Knapsack sprayers

Using 1000 lt./ha: Use 8 g/20 litre and 6 g/15 litre knapsack for control of aphids and whiteflies.

Using 500 lt./ha: Use 8 g/20 litre and 6 g/15 litre knapsack.

To measure 8 g product, put Actara to the level of the sealing cap of the Actara product pack.

# Pre-Harvest interval

Tomatoes, cucurbits	3 days
French beans, peas	7 days
Brassicas	7 days
Pepper, okra	3 days
Lettuce	7 days

#### Drench Application

Apply at Dase of the plant using knapsack sprayers without the nozzles. Calibrate the sprayer to an output of 20-50 ml. per plant. Use at least 8 g/20 lt. knapsack.

#### Drip Irrigation

Application into the drip irrigation (tubes as well as tapes). Product to be applied to the central fertilizer injector or fertigation unit. Make sure that the product is evenly distributed up to the end of the drip tubes. Higher rates are recommended for whitefly control and for bigger plants.

## In furrow application

Soil surface application at low water volume (200-300 lt./ha) incorporated at sowing time or before transplanting. Band application to

<u>Foliar treatment</u> <u>Crop</u>	<u>Pests</u>	Rate <u>.</u> <u>100 lt.</u>	g/ <u>Ha</u>
Tomato	Aphids whiteflies	20 40	200 400
Beans, peas	aphids, whiteflies	20 40	200 400
Brassicas	aphids	20	200
Lettuce	aphids	20	200
Cucurbits	aphids	20	200
Pepper	aphids whiteflies	20 40	200 400
Okra	whiteflies	40	400
Ornamentals/ Flowers	aphids whiteflies jassids	20 40 20	200 400 200

## Soil treatment

<u>Crop</u>	<u>Pest</u>	<u>Rate g/100 linear m</u>
Tomato	Colorado Potato beetle Whiteflies	4 4-8
Ornamentals/ Flowers	Aphids Whiteflies	40-80 mg/m <sup>2</sup>

the plant furrow done with herbicide nozzles.

### Mixing

Whenever tank mixes are used carry out a physical compatibility test first. Fill the sprayer 1/10 - 1 /4 with water and add the required amount of ACTARA<sup>®</sup>. Ensure thorough agitation while topping up and during spraying.

Apply within a few hours after mixing. Prepare no more spray mixture than is needed for the immediate operation.

<u>Note</u>

Wet the whole plant thoroughly but avoid run-off and spray drift to non-target sites. Treat only when there is little or no wind. Do not overdose by overlapping applications or by exceeding the recommended rate.

## Precautionary measures

KEEP LOCKED UP OUT OF REACH OF CHILDREN and other unauthorised persons and animals.

### **Operator Safety**

AVOID contact of skin, eyes or clothing with concentrate or spray mixture. DO NOT breathe spray mist. DO NOT eat, drink or smoke while handling the product, wash hands and face before doing so. If any disposition occurs, stop work, follow first aid measures, and call a physician. WEAR protective clothing, i.e., for mixing/loading: impermeable gloves, face mask; for application: overalls, hat or cap; facemask, gumboots and impermeable gloves. IF CONTAMINATION OCCURS with concentrate or spray mixture, immediately wash skin thoroughly, flush eyes several times with abundant fresh water, and remove contaminated clothing. AFTER USE, thoroughly clean protective equipment and wash entire body and change clothing. Wash contaminated clothing before re-use.

#### First Aid

If any indisposition occurs stop work immediately and call a physician. SKIN CONTACT: Remove contaminated clothing and thoroughly wash the affected parts of the body with soap and water.

EYE CONTACT: Rinse eyes with clean water for several minutes. If poisoning is suspected, stop work immediately and call a physician. Show label to the physician. If inhaled move to clean fresh air. If swallowed, repeatedly administer medicinal charcoal in plenty of water. Seek medical advice immediately if a large volume of concentrate was ingested.

Note: Never give anything orally to an unconscious person and never induce vomiting.

Poisoning symptoms: No case of human poisoning is on record

Antidote: No specific antidote is known; apply symptomatic therapy.

## Environment and wildlife

TOXIC TO BEES. DO NOT spray when bees are actively foraging in an area. Application should be timed to provide the maximum possible interval between treatment and the next period of bee activity. At the

recommended rates ACTARA<sup>®</sup> is practically non-toxic to fish, other aquatic organisms and birds. DO NOT contaminate soil, stagnant or running water by disposal of waste.Newly treated areas must not be grazed and all livestock is to be kept out; no food or feed should be collected from treated areas for a period corresponding to the preharvest interval and all livestock is to be kept out.

#### Storage

Store away from sun and damp in a cool dry place. Store in original tightly closed containers in a well-ventilated area. Avoid storage above 35<sup>0</sup>C. Store under lock and key, away from foodstuffs, drinking water, animal feeds, children, animals and unauthorised persons.

## Product and Container Disposal

Dispose of surplus product on a landfill site approved for pesticides, or divide remainder into small quantities and bury in a safe place away from water supplies. Dilute small quantities of surplus spray mixture with plenty of water and spray on fallow land. Dispose of containers in a landfill site approved for pesticides, or burn in a safe place. DO NOT reuse empty containers for any other purpose, especially not for food, feed or storing drinking water.

## Leakage and Spillage

Remove heavily contaminated soil and bury in a safe place away from water supplies.

Spillage: soak up with sand, sawdust, soil or an oil-binding agent. Collect contaminated material thoroughly and bury in a safe place or put in a waste bin or plastic bag, mark it and dispose of on a landfill site approved for pesticides. Treat spill area with plenty of water. Do not reuse-spilt product.

WHO Class: III (the product is unlikely to present acute hazard in normal use)

**Shelf Life**: At least 2 years from date of manufacture in original sealed containers.

## Notice to User

This pest control product is to be used only in accordance with the directions on this 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. Since the manufacturer cannot control the application, use, storage or processing of the product, the manufacturer cannot accept responsibility thereof.

Since the occurrence of resistance cannot be foreseen, the manufacturer accepts no responsibility for any loss or damage to crops resulting from failure of ACTARA® to control a resistant strain of the target pest.

## Before using the product, please read the attached product label and accompanying packaging leaflet. Use pesticides safely.

® = registered trademark of Syngenta Crop Protection AG, Basle, Switzerland