Thiacloprid

caLypso®

profile

Chemical class	Chloronicotinyl
Common name	Thiacloprid
Mode of action	Calypso® selectively acts on the insect nervous system as an agonist of the nicotinic acetylcholine receptor, thus disturbing signal transmission in the insects nervous system, leading to the death of the treated insect. The action mechanism of thiacloprid differs not only from that of organophosphorus compounds and carbamates (both of which are acetyl cholinesterase inhibitors) but also from that of the pyrethroids, which act on other fibre membrane proteins. As a result of this mode of action, there is no cross-resistance to conventional insecticides such as organophosphates, carbamates, and pyrethroids, consequently, thiacloprid is excellent for resistance management strategies.
Pest Spectrum	Sucking and biting insect pests in fruit crops, vegetables and ornamentals that include aphids, white flies, jassids, scales, mealybugs, leafminers, stemborer and beetles.

features

Systemic action, plus contact and translaminar

Due to its systemic properties, the active ingredient is ingested by sucking and biting insects via the sap. Apart from this stomach effect it also exhibits a contact activity, as insects move around on treated plant surfaces.

Suitable for resistance Management

Due to the new mode of action, Calypso® is suitable for resistance management where organophosphates, carbamates and pyrethroids have been traditionally used.

Application flexibility / Short pre-harvest interval

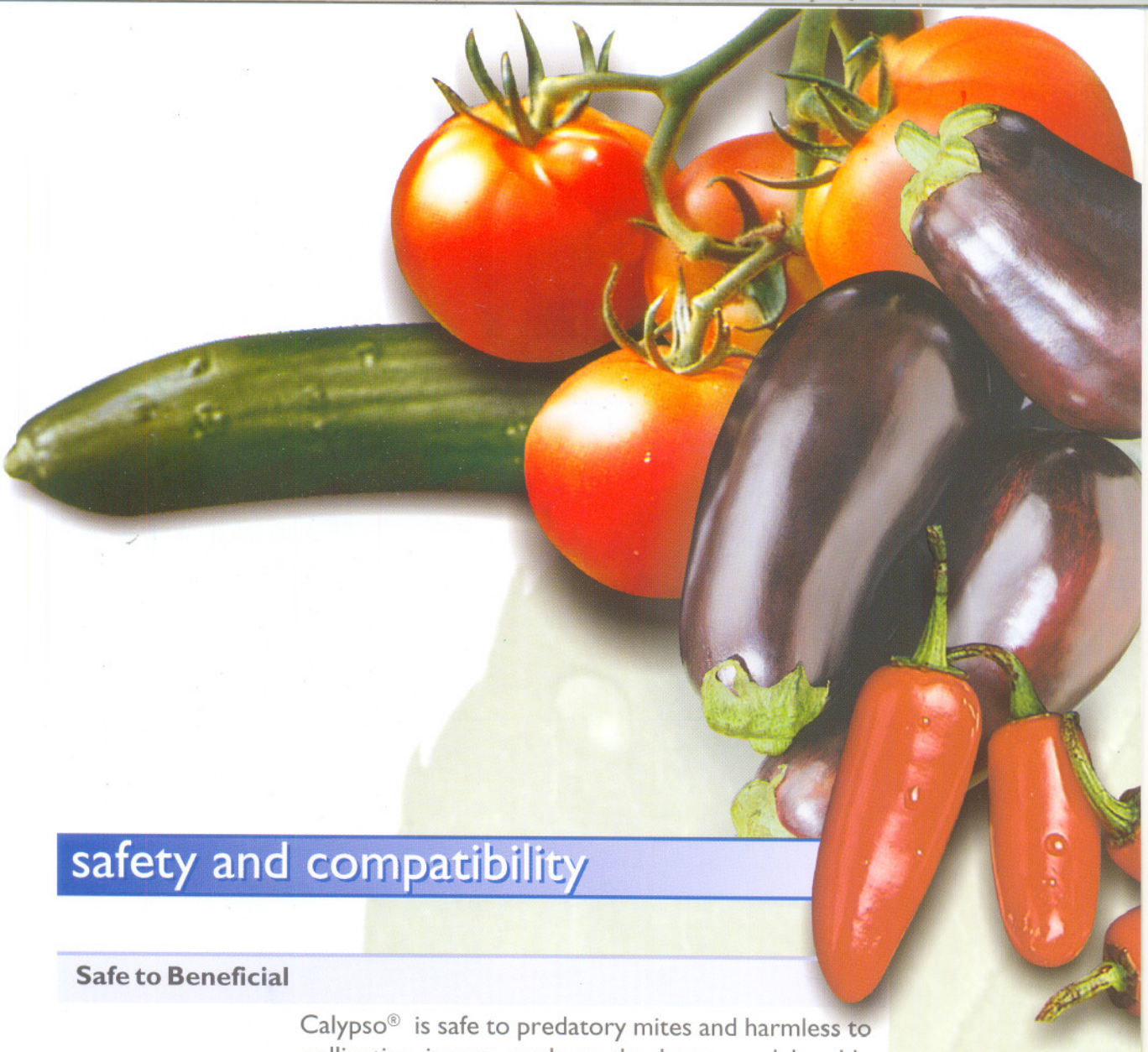
A short PHI of 3 days allows Calypso® to be applied even close to harvesting.

Weather resistance

Once applied on leaves, Calypso® is stable even under conditions of heavy rain and sunlight and remains on the leaf's surface after application for a considerable time, thus allowing a continuous penetration of the active ingredient into the leaf.

Long duration of activity

This continuous penetration of the active ingredient of Calypso® into the leaf provides 7 – 14 days control depending on the target pest and pest pressure.



safety and compatibility

Safe to Beneficial

Calypso® is safe to predatory mites and harmless to pollinating insects such as the honey and bumble bees, even when applied during the flowering period.

Safe to users and the environment

Calypso® is safe to applicators, consumers and the environment when used as recommended.

Good plant compatibility

Calypso® is well tolerated by all crops listed on the label when used at the recommended rates.

Note: As the different species and varieties of ornamentals may differ in their sensitivity to chemical spray, users are advised to always test for crop compatibility before large scale application is undertaken.

application recommendations

Crop	Insect Pest	Application Rate	Remarks
Ornamentals (e.g. Roses, Carnations)	Aphids Thrips Whiteflies	300 ml/ha or 0.3 ml/lt of water	Apply at first signs of insect infestation and repeat at 7 – 14 day interval. Apply 2 consecutive applications and alternate with insecticides with different modes of action before re-introduction of Calypso.
Tomato Karella Egg plant Chilli Pepper Cabbages Cucumber Courgette Melon Water melon	Aphids Thrips White flies Caterpillars	200 - 400 ml/ha or 0.2 - 0.4 ml/lt of water	Apply at first signs of insect infestation; repeat at 7 – 14 day interval. Maximum number of applications – 3 sprays per season. Pre-harvest interval (PHI): 3 days for vegetable crops listed.

Note: Water volume - 400 - 1000 litres of water per hectare

Resistance management guidelines

To prevent possible resistance development against chloronicotinyls, spray applications of Calypso SC 480 should not follow that of imidacloprid and other compounds of the same chemical class. If subsequent spray applications after chloronicotinyl treatments are required, products from other chemical groups with a good efficacy on the target pests concerned should be used.