

TECHNICAL DATA BULLETIN

PRODUCT TECHNICAL INFORMATION AND APPLICATIONS

ALPHACIDE[®] 100EC

(Alpha-Cypermethrin 100 g/L "EC")

1. INTRODUCTION:

ALPHACIDE 100EC is an emulsifiable concentrate synthetic pyrethroid insecticide formulation. It contains 100 g / L of the active ingredient "*alpha-Cypermethrin*". Alphacide 100EC is used for the control of a wide range of chewing and sucking insects (particularly *Lepidoptera*, *Coleoptera*, and *Hemiptera*) in fruit (including citrus), vegetables, vines, cereals, maize, beet, oilseed rape, potatoes, cotton, rice, soya beans, forestry, and other crops.

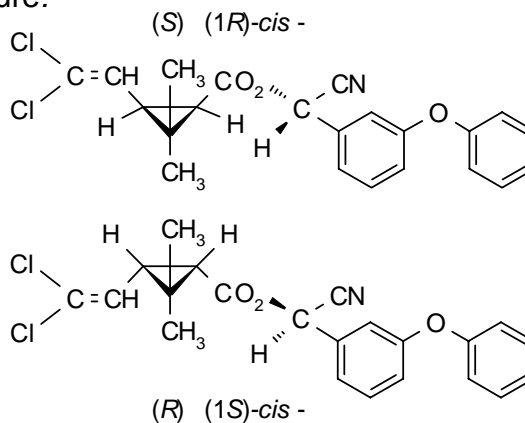
2. ACTIVE INGREDIENT:

Common Name:
Chemical Group:
Chemical Name (IUPAC):

alpha-Cypermethrin
Pyrethroid

A racemate comprising (S)- α -cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate and (R)- α -cyano-3-phenoxybenzyl (1S,3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

Chemical Structure:



Molecular formula:	C ₂₂ H ₁₉ Cl ₂ NO ₃
Relative Molecular Mass:	416.3
CAS Registry Number:	67375 – 30 - 8
n-O/W Partition Coefficient:	K _{ow} Log P = 6.94 at pH7
Vapour Pressure:	2.3 x 10 ⁻² mPa at 20 °C

3. PHYSICOCHEMICAL PROPERTIES:

Assay:	alpha Cypermethrin 100 g/L
Appearance:	Clear light yellow liquid free of visible impurities
Density:	0.9140
Acidity as H ₂ SO ₄ :	0.60 g/Kg
Water contents:	1.0 g/Kg
Solubility in water	Form emulsion
Flash Point:	41.3 °C

4. MODE OF ACTION:

ALPHACIDE 100EC contains the active ingredient Alpha-Cypermethrin which is a broad-spectrum non-systemic pyrethroid insecticide with contact and stomach action. It acts on insect's central and peripheral nervous system at very low doses.

ALPHACIDE100EC is a fast acting broad-spectrum insecticide with an ovicidal activity. It has an excellent stability on the plant. It is also resistant to rain wash-off.

5. USES:

ALPHACIDE 100EC is used for the control of a wide range of insect pests including chewing and sucking insects in a large number of crops such as vegetables, cereals, cotton and Fruit trees. It controls bollworms, cutworms, armyworms, leafminers, fruit flies, aphids, scales, whitefly, weevils, beetles, loppers and others.

6. PHYTOTOXICITY:

ALPHACIDE 100EC is not phytotoxic when used as directed.

7. COMPATIBILITY:

ALPHACIDE 100EC is compatible with many pesticides. However, a small test for compatibility has to be carried out before mixing in large quantities.

8. APPLICATIONS:

ALPHACIDE 100EC is applied when the insects appear and repeated as necessary. It is applied as a foliar spray after being diluted in water. Alphacide 100EC is recommended at the rate of 2.5 – 15 g a.i./ha i.e., 0.05 – 0.03 L product/ha.

The table below can be used as a guide for application:

CROPS	TARGET PEST(S)	APPLICATION RATE
• Vegetable Crops: Tomato, Cucumber, Pepper, Watermelon and Cabbage.	Cut Worms, Army Worms, Boll Worms, Cabbage Moth, Aphids, White-files, Leaf Miner, Thrips and Flee Beetle.	15 – 25 ml/100 L of water or 150 ml / ha
• Potatoes:	Potato Tuber Moth, Leaf Miners & Aphids.	200 ml / ha
• Fruits Trees: Citrus trees, Pome, Olive & Stone Fruits.	Apple Aphid, Fruit Moths, Mediterranean Fruits Fly, Scales, Cut Worms & White Flies.	15 – 30 ml/100 L of Water or 175 ml / ha
• Grappes :	Mealy Bugs, Green Leafhopper and Grape Berry Moths.	15 ml/100 L of water
• Date Palms:	Dubas Bug.	20 ml / 100 L of Water
• Field Crops: Wheat, Barley, Alfalfa & other Forages.	Cut Worms, Suni Bug, European Corn Borer and Boll Worms.	150 – 400 ml / ha

9. WITHHOLDING PERIOD:

Varies with the crop (from 7 – 14 days). For details please refer to the product label.

10. HANDLING, STORAGE AND TRANSPORTATION:

When handling Alphacide 100EC wear protective neoprene gloves, cotton overalls, and rubber boots. Alphacide 100EC Store in its original tightly closed container in a cool dry place out of reach of children and away from feed and food products.