



TECHNICAL DATA BULLETIN

PRODUCT TECHNICAL INFORMATION AND APPLICATIONS

DECIBAN[®] 25EC

(Deltamethrin 25 g/L "EC")

1. INTRODUCTION

DECIBAN[®] 25EC is an emulsifiable concentrate formulation of the synthetic pyrethroid Deltamethrin. It contains 25 g/L of Deltamethrin. DECIBAN 25EC is used as an insecticide for the control of a wide range of insect pests in various agricultural crops.

2. ACTIVE INGREDIENT

Common Name: *Deltamethrin*

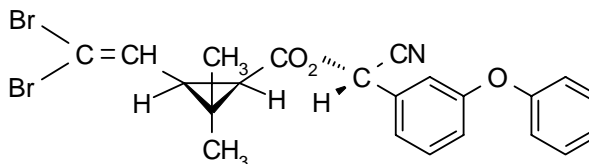
Chemical Group: *Pyrethroid*

Chemical Name (IUPAC)

(S)- α -cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate

Roth: (S)- α -cyano-3-phenoxybenzyl (1R)-cis-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate

Chemical Structure:



Molecular Formula: $C_{22}H_{19}Br_2NO_3$

Relative Molecular Mass: 505.24

CAS Registry Number: 52918 – 63 – 5

K_{ow} Log P: 4.6 at 25°C

Vapour Pressure: 1.24×10^{-5} mPa at 25°C

3. PHYSIOCHEMICAL PROPERTIES OF THE PRODUCT

Assay	"Deltamethrin" 25 ± 4 g/L
Appearance	Clear Yellow Liquid free of Visible Impurities
Odour	Aromatic
Density	0.893± 0.006 (Kg/L)
Acidity as H ₂ SO ₄	<0.5 (g/Kg)
Water Contents	<0.5 (g/Kg)
Flammability	Flammable
Flash Point	43.6 °C
Explosivity	Not Explosive
Corrosivity	Corrosive to iron
Solubility in Water:	Forms Emulsion

4. MODE OF ACTION

DECIBAN[®] 25EC is a fast acting non-systemic insecticide with contact and stomach action. As a pyrethroid it prevents the sodium channel from functioning so that no transmission of nerve impulses can take place.

5. USES

DECIBAN[®] 25EC is used for the control of various insect pests on agricultural crops, fruit trees, vegetables, ornamentals and lawns. It is also recommended for use against locust.

DECIBAN[®] 25EC may have 3 – 4 weeks persistence and it is particularly effective on caterpillars and sucking insects. However, temperatures above 35°C may reduce persistence.

6. APPLICATIONS

DECIBAN[®] 25EC is used at first signs of damage with follow-up treatments where necessary at 10 – 14 days intervals.

It is applied as a foliar spray, after being diluted with water, at the rate of 7.5 – 25 g.a.i/ha.

The following table shows the recommended application rates for various pests and crops:

Crops	Pests	Application Rate	PHI
Vegetables: Tomato, Cucumber, Okra, Pepper, Eggplant, Cabbage, Carrots Onion, Garlic, Lettuce and Cauliflower	Aphids	50 ml/100 L water	3 days
	Whiteflies, Thrips, Leaf miners, mealy Bugs, Scale insects and Caterpillars.	50 ml/100 L water 30 ml / 100 L of Water	
Fruit trees: Stone and Pome Fruits	Aphids, Bugs, Fruit flies and Caterpillars.	30 – 50 ml / 100 L of Water	14 days
Field Crops: Wheat and Barley	Aphids and Grain moth	300 ml / 100 L of Water	21 days
Alfalfa	Grass hoppers, Locust and Caterpillars	250 ml / 100 L of Water	7 days
Potatoes	Aphids, Thrips, Potatoes tuber moth and Beetles	50 – 70 ml / 100 L of Water	
Grapes	Caterpillars	70 ml / 100 L of Water	25 days
Data Palm	Dubas bug and Lesser Date moth	50 ml / 100 L of Water	
Ornamentals	Leaf hoppers, Aphids, Caterpillars, Scale insects and Whiteflies	30 – 50 ml / 100 L of Water	

7. PHYTOTOXICITY

DECIBAN[®] 25EC is not phytotoxic when used according to the recommendations stated in the product label.

8. COMPATIBILITY

DECIBAN[®] 25EC is compatible with most pesticides and foliar fertilizers.

9. HANDLING, STORAGE AND TRANSPORTATION

DECIBAN[®] 25EC should be transported its original labeled, tightly closed container and stored in a dry well ventilated store at room temperature and away from direct sunlight. It should also be kept away from children, animals, food, feed and drinks and unauthorized personnel. Personnel involved in handing this material should wear protective gloves, clean protective clothing and a facemask.

10. SPECIAL PRECAUTIONS

DECIBAN[®] 25EC should not be sprayed on crops suffering from drought or other physical stress.

DECIBAN[®] 25EC is harmful in contact with skin. It is irritating to eyes and skin. It is flammable, dangerous to bees, fish and other aquatic life.