



## TECHNICAL DATA BULLETIN

### PRODUCT TECHNICAL INFORMATION AND APPLICATIONS

# **ENDOFORCE<sup>®</sup> 350EC**

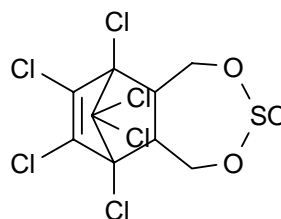
“Endosulfan 350 g/L”

#### 1. INTRODUCTION:

ENDOFORCE 350EC is an emulsifiable concentrate formulation of the Cyclodiene organochlorine compound *Endosulfan*. It is used as a contact and ingested insecticide and acaricide for the control of a wide range of insect pests and mites in a number of agricultural crops.

#### 2. ACTIVE INGREDIENT:

Common Name	Endosulfan
Chemical Group	Cyclodiene organochlorine compound
Chemical Structure:	



Molecular Formula	C <sub>9</sub> H <sub>6</sub> Cl <sub>6</sub> O <sub>3</sub> S
Relative Molecular Mass	406.9
CAS Registry Number	115 – 29 – 7
Vapour Pressure	0.83 mPa at 20 °C

#### 3. PHYSIOCHEMICAL PROPERTIES OF THE PRODUCT:

Assay	"Endosulfan" 350 ± 17.5 g/L
Appearance	Clear yellow liquid free of visible impurities
Odour	Aromatic
Density	1.0666 Kg/L
Viscosity	2.0 – 2.5 Cp (Brookfield, spindle 2, r.p.m 60 @ 24.9 °C)
Flash Point	30 °C
Water contents	0.03% w/w (Specifications < 0.40% w/w)
Acidity as H <sub>2</sub> SO <sub>4</sub>	0 0% w/w (Specifications < 0.0078% w/w)

#### 4. MODE OF ACTION:

Non-systemic insecticide and acaricide with contact and stomach action  
Antagonist of the GABA receptor-chloride channel complex.

#### 5. USES:

Endoforce 350EC is used for the control of sucking, chewing and boring insects and mites in a wide range of agricultural crops including wheat, barley, maize, cotton, tea, coffee, rice, sugar cane, alfalfa, oil seed crops, potatoes, apples, apricots, citrus, strawberries, wines, olives, cotton, vegetables and others.

The most important pests controlled by Endoforce 350EC include aphid, leafhoppers, mites, beetles, bollworms, stem borers, armyworms and many others.

#### 6. APPLICATION:

ENDOFORCE 350EC is applied as a spray after being diluted with water. Common application equipment are used, however, uniform coverage is necessary for good results. It is applied when insects appear and repeated if necessary.

ENDOFORCE 350EC is applied at the rates of 600 – 1,000 ml/ha or 100-180 ml/100 L of water. The following table can be considered as a guide for usage in various crops:

Crop	Pest	Application Rate	PHI
<b>Cereal crops</b> including Wheat and Barley	Aphids, Thrips, Mites and Caterpillars	600 –700 ml / ha	28 Days
Citrus trees	Aphids, Thrips, Mites, Whiteflies, Thrips and Ants, Leaf hoppers	100 – 170 ml / 100 L of water	28 Days
Pome Trees	Aphids, Thrips, Mites, Whiteflies, Beetles, Leaf hoppers	100 – 170 ml / 100 L of water	28 Days
Apples and pears	Aphids, Thrips, Mites, Mealybugs, Beetles and Caterpillars	100 – 170 ml / 100 L of water	28 Days

When using **ENDOFORCE** 350EC spray volume should be adjusted to achieve total cover

7. PHYTOTOXICITY:

**ENDOFORCE** 350EC is not phytotoxic when applied according to recommendations. However, some injury has been observed in alfalfa and lima beans. The material is not recommended for use on concord grapes.

8. WITHHOLDING PERIOD:

Keep all livestock out of treated areas for at least 3 weeks.

9. COMPATIBILITY:

**ENDOFORCE** 350EC can be mixed with a number of insecticides such as dimethoate, Malathion, and methomyl. It is compatible with strongly alkaline materials.

10. HARVEST INTERVAL:

3 – 6 weeks depending on the crop to be treated, please refer to the product label for details.

11. HANDLING, STORAGE AND TRANSPORTATION:

**ENDOFORCE** 350EC should be transported or stored in its clearly labelled original container, under lock and key secured from access by unauthorised persons and children. No food or drink should be stored in the same compartment. Full protective clothing, including impermeable boots, clean overalls, gloves and respirators should be provided for all personnel handling this material.

12. SPECIAL PRECAUTIONS:

**ENDOFORCE** 350EC is toxic if swallowed. Harmful if contacted the skin. It is also irritating to the respiratory system, flammable, harmful to bees and dangerous to fish and other aquatic life.