



## TECHNICAL DATA BULLETIN

### PRODUCT TECHNICAL INFORMATION AND APPLICATIONS

# **CEMORT<sup>®</sup> 50EC**

*Cyfluthrin 50 g/L "EC"*

**For the control of cockroaches, spiders, ants,  
fleas, flies, silverfish, bedbugs, & mosquitoes**

#### 1. INTRODUCTION:

**Cemort 50EC** is a highly effective Public Health Pyrethroid Insecticide in the form of an emulsifiable concentrate formulation containing 50 g / L of *Cyfluthrin* as active ingredient. It is used for the control of public health both flying and crawling insect pests.

**Cemort 50EC** acts mainly as a contact pesticide, and has a good stomach action. It has a fast knockdown effect coupled with broad spectrum long lasting residual activity. **Cemort 50EC** gives good control of numerous species of household and public health pests. It controls not only normally susceptible strains of pests but also strains resistant to organophosphates and carbamates.

**Cemort 50EC** has a very low irritancy, particularly suitable for sensitive applications such as use in hospitals, hotels, restaurants, offices, livestock farms, etc.

**Cemort 50EC** acts very quickly. In most cases the insects are knocked down within minutes, and pests hidden from view during application will often be flushed out of their hiding places and will come into contact with the treated surface. The results of the treatment are clearly evident.

**Cemort 50EC** was formulated according to World Health Organization (WHO) and enlisted by WHO in its specifications for use in public health programmers.

**Dosage:** Mix 80 ml of the formulation in 10 liters of potable water and thoroughly spray all possible hiding places where pests can occur with 50 ml of spray mixture per square meter. If hiding places are not directly accessible, spray a barrier around them.



## 2. ACTIVE INGREDIENT PROPERTIES:

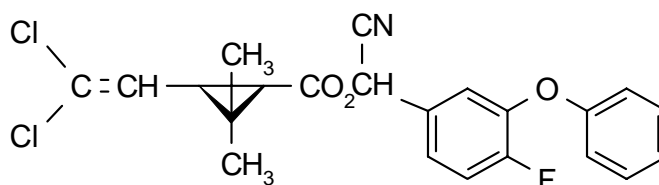
**Common name** Cyfluthrin

**Chemical Group** Pyrethroid

**CAS Registry No.** 68359-37-5

**Molecular Formula** C<sub>22</sub> H<sub>18</sub> Cl<sub>2</sub> FNO<sub>3</sub>

**Structural Formula**



**Form / Appearance** pasty yellow mass

**Molecular weight** 434.3

**Melting Point** 60 ° C

**Vapour Pressure** 1.62 x 10 to the minus 8 mmHg

**Density** 0.830 g/ml

**Adsorption Coefficient**  
**Log K<sub>ow</sub>** 5.62

**pH** 5.6

**K<sub>oc</sub>** 10,000

**Acute oral LD<sub>50</sub>, Rat** 500 mg/kg

## 3. PHYSIOCHEMICAL PROPERTIES OF THE PRODUCT:

**Assay:** *Cyfluthrin* 50.0 g/L  
**Appearance:** Light yellow liquid free of visible impurities  
**Density:** 0.9026  
**Flash Point:** 38 ° C  
**Water contents:** <1.3 g/Kg  
**Acidity as H<sub>2</sub>SO<sub>4</sub>:** 0.38 g/Kg  
**Solubility in water:** Forms emulsion



#### 4. MODE OF ACTION:

**Cemort 50EC** is a non-systemic fast acting insecticide with contact and stomach action. Acts on the nervous system and has a long residual activity

#### 5. USES:

**Cemort 50EC** is used as a Public Health Insecticide for the control of crawling and flying insect pests such as cockroaches, spiders, ants, fleas, flies, silverfish, bedbugs, & mosquitoes

#### 6. COMPATIBILITY:

**Cemort 50EC** is compatible with other pesticides. However, small mixture should be made and tried before mixing large quantities.

#### 7. APPLICATION:

**Cemort 50EC** is applied as surface residual spray at the rate of 6 – 8 ml / L, ULV spray of thermal fogging. The product is applied after being diluted with water or a suitable carrier such as C-Deck, Diesel oil or Kerosene.

### General Recommendations:

#### CEMORT 50 EC

Pests	Dosage / Concentration	Application method
Mosquitoes and flies	60 ml/10 l water (50 ml solution/m <sup>2</sup> )	<b>Indoor and outdoor</b> Spray Cemort 50 EC anywhere the pests congregate or pass.
	200 ml/10 l water (5-10 ml solution/m <sup>2</sup> )	Thermal fogging
Cockroaches	80 ml/10 l water (50 ml solution/m <sup>2</sup> )	Spray Cemort 50 EC anywhere the pests congregate or pass.



### Directions for Use:

Situations	Pest	Critical Comments	Rate
Meatworks (non product areas), farm buildings, food processing establishments, shops, offices, factories, storerooms, hospitals, schools, barracks, houses, ships, rubbish tips	Cockroaches	Thoroughly spray hiding places (eg. Cracks and crevices, behind stoves and sinks, in cupboards, around drains, rubbish bins etc.) until point of run-off. If hiding places are not directly accessible spray barrier strips around them. Repeat treatment as required.	8 ml / 1 L water
	Spiders	Thoroughly spray spiders, their webs and cervices in which they hide. Do not remove webs for a few days	
	Ants	Where possible locate the nest and spray. If nest is inaccessible, spray all infested areas.	
	Fleas	Clean or vacuum infested areas and burn all dust collected. Lightly spray all infested areas especially under furniture. Pests should be treated with a suitable flea control product registered for use on animals. Do not apply more than 100 mL/m <sup>2</sup> to carpet surfaces.	
	Flies	Spray surface where flies are known to rest, eg on ceilings or around windows. Effective for many weeks.	
	Silverfish	Locate the source of the infestation and spray. If it cannot be located spray all surfaces over which silverfish travel, especially inside cupboards.	
	Bedbugs	Fumigate all infested mattresses or clothing. Wash sheets and clothing before re-use. Apply Cemort 50EC to walls, cracks and crevices, skirting boards and bed frames.	
	Mosquitoes	Apply as wet spray till point of run-off, to areas where mosquitoes rest such as walls and awnings, fences and some vegetated areas.	
Rubbish tips	Flies	Spray surfaces of rubbish. Apply 200-300 m L of spray/m <sup>2</sup>	Knockdown Spray 1 m l / L
Mosquito net impregnation. <b>For protection against Mosquito bites when sleeping</b>	Mosquitoes	<ol style="list-style-type: none"> <li>1. Measure the total area of the bed net. i.e.2 x (height x length)+2 x (height x width) + (length x width)</li> <li>2. Determine the total volume of water absorbed by the net and then re- dry the net.</li> <li>3. Mix the calculated amount of Cemort 50EC with the necessary volume of water.</li> <li>4. Soak the bednet and ensure the solution is evenly distributed through the net.</li> <li>5. Lay the net on a clean horizontal surface out of bright sunlight until dry.</li> <li>6. Re-impregnation may be required every six months; avoid washing with detergent except prior to re-impregnation.</li> <li>7. <b>Do not rely only on impregnated bednets for protection against mosquito-home diseases. Protective clothing, repellents, staying indoors during periods of peak biting, avoidance of mosquito habitats, and malaria tablets should also be considered.</b></li> </ol>	1 ml / m <sup>2</sup> of netting



**Cemort** 50EC is primarily used for residual spray applications, to walls, cracks and crevices, and other surfaces where pests may occur. In addition, **Cemort** 50EC can be diluted and applied as a fog using thermal and mechanical fogging equipment. The use of water carrier means that for is very transparent, but the efficacy is the same as for thick fogs.

#### 8. COMPATIBILITY

**Cemort** 50EC is not compatible for mixing with alkaline or strong acidic products.

#### 9. AVAILABILITY AND PACKING

The product is currently available in 1, 5 and 10 liter containers.

#### 10. HANDLING, STORAGE AND TRANSPORTATION

**Cemort** 50EC 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 handling this material should wear protective gloves, clean protective clothing and a facemask.