

**Material Safety Data Sheet (MSDS)**  
**AMIGO 25 EC**

**IDENTIFICATION OF THE SUPPLIER:**

**AGRO CHEMICALS INDUSTRIES LTD**  
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**PRODUCT IDENTIFICATION:**

**Trade Name:** Amigo 25 EC  
**Common Name:** Lambda -Cyhalothrin  
**Chemical Name:** (S)- $\alpha$ - cyano-3- phenoxybenzyl (z)- (IR,3R)-3-(2-chloro- 3,3,3-trifluoroprop-1-enyl) -2,2- dimethylcyclopropanecarboxylate and ( R ) - $\alpha$ -cyano-3- phenoxybenzyl (z) – (IS,3S)- 3-(2-chloro-3,3,3-trifluoroprop-1-enyl) 2,2-dimethylcyclopropanecarboxylate.  
**Chemical Formula:** C<sub>23</sub>H<sub>19</sub>ClF<sub>3</sub>NO<sub>3</sub>  
**Molecular Weight:** 449.9

**PRODUCT COMPOSITION:**

**Active Ingredient:** 2.5% w/v Lambda -Cyhalothrin.  
**Inert ingredient:** UP to 1 Liter.

**HAZARDS IDENTIFICATION:**

Harmfull if swallowed. A moderate irritant to eyes. May cause Tingling/ numbness in exposed areas (paraesthesia). Very toxic to aquatic organisms.



## FIRE-FIGHTING MEASURES: -

**Flammable:** Keep fire exposed containers cool by spraying with water.

**Extinguishing Media:** For small fires, use foam, carbon dioxide, dry powder extinguish ant.  
For large fire, use foam or water- fog; avoid use of water jet. Contain gun-off water with, for example, temporary earth barriers.

**Fire fighting protective equipment:** A self contained breathing apparatus and suitable protective clothing must be worm in fire conditions.

## PHYSICAL-CHEMICAL DATA(product):

**State:** Liquid.

**Color:** Colorless to pale yellow.

**Odor:** Aromatic odor

**Density:** 0.9 gm/ml (25 °C)

**PH:** 6.6 (25 °C).

**Flammability:** Flammable

**Explosivity:** Non explosive

**Viscosity:** Non viscosse

**Solubility in water:** Emulsifiable product

**Flash Point:** Not less than 38 °C.

## STABILITY AND REACTIVITY

**Hazardous decomposition products:**

Combustion or thermal decomposition will evolve toxic and irritant Vapors.

**Stability:** Stable to light, stable on storage at (15-30 °C).

## FIRST-AID MEASURES:

**Eye contact:** Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain medical attention.

**Skin contact:** Take off immediately all contaminated clothing. Wash skin immediately with cold water, followed by soap and water. Such action is essential to minimize contact with skin. Contaminated clothing should be washed before re-use.

**Inhalation:** Remove victim to fresh air. Provide artificial respiration, if necessary. Get medical attention immediately.



**Ingestion:** If swallowed, seek medical advice immediately and show this data sheet, if possible. Do not induce vomiting.

**Medical advice:** Gastric lavage may be effective when performed within 4 hours of ingestion.

Aspiration of this material into the lungs should be avoided.

Symptomatic treatment and supportive therapy as indicated.

## ACCIDENTAL RELEASE MEASURES:

**Personal precautions:** Ensure suitable personal protection during removal of spillages.

This means wearing a face mask that gives protection against organic vapours, eye protection, chemically resistant gloves, boots and coveralls.

**Clean up methods:** Adsorb spillages onto sand, earth or any suitable adsorbent material.

Transfer to a container for disposal.

Wash the spillage area with water.

Washings must be prevented from entering surface water drains.

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

## PERSONAL PROTECTION/SAFETY:

### General Precautions:

Good local exhaust ventilation.

Avoid long-term exposure, even small quantities. Repeated inhalation or skin contact may without symptoms progressively increase susceptibility to Ethion poisoning

### Personnel Protection

Facial skin contact may cause temporary facial numbness. Sensitive workers should use protective clothing. Avoid contact with eyes and skin. Do not inhale spray mist. When preparing spray wear cotton overalls buttoned to the neck and wrist and washable hat, elbow length

PVC gloves and face shield or goggles. After use and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

### Skin Protection:

Natural rubber gloves and appropriate protective clothing, necessary to prevent skin contact with the product



**Other protective equipment:**

Showers and eye - washers in working area.

**HANDLING AND STORAGE:**

**HANDLING:** Read the label before use.

**Safe handling advice:** Avoid contact with skin and eyes. Do not breathe spray. Avoid inhalation of high concentrations of vapours. When using does not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.

**STORAGE:** Safe storage advice: Keep only in the original container. Keep container tightly closed.

Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs.

**Storage life:** Physically and chemically stable for at least 3 years when stored in the original unopened sales container at ambient temperatures.

**TOXICITY INFORMATION:**

**ACUTE TOXICITY (LETHAL DOSES)**

**Oral Median Lethal Dose rat :** 923 .. 1930 mg/kg

Harmful if swallowed.

**Dermal Median Lethal Dose rat :** (calculated) > 4000 mg/kg

**Inhalation :** Unlikely to cause harmful effects under normal conditions of handling and use.

**ACUTE TOXICITY (IRRITATION, SENSITISATION ETC.)**

**Eye Irritation:** The concentrate is at least a severe eye irritant.

**Skin Irritation:** Severe irritant to rat skin.

**Skin Sensitization:** It is a mild skin sensitiser in animal tests.

In humans may cause tingling or numbness in exposed areas (paraesthesia).

The effect may result from splash, aerosol or transfer to the face from contaminated gloves and hands.

This effect is transient, lasting up to 24 hours.

**CHRONIC TOXICOLOGICAL EFFECTS / LONG TERM EXPOSURE**



**Long Term Exposure:** No long term risks to man are associated with the normal handling and use of this material.

## ECOLOGICAL INFORMATION: -

### ECOTOXICITY

<b>Birds</b>	Acute oral LD50 for mallard ducks >3950 mg/kg. Dietary LC50 for quail >5300 mg/kg. No accumulation of residues in eggs or tissues.
<b>Fish</b>	LC50 (96 h) for bluegill sunfish 0.21, rainbow trout 0.36 µg/l.
<b>Daphnia</b>	EC50 (48 h) 0.36 µg/l.
<b>Algae</b>	ErC50 (96 h) for <i>Selenastrum capricornutum</i> >1000 µg/l.
<b>Other aquatic spp.</b>	Intrinsic toxicity to aquatic organisms is greatly reduced by rapid loss from the water by adsorption and degradation.
<b>Bees</b>	LD50 (oral) 38 µg/bee; (contact) 909 µg/bee.
<b>Worms</b>	LC50 for <i>Eisenia foetida</i> >1000 mg/kg soil.
<b>Other beneficial spp.</b>	Toxic to some non-target arthropods. Effects under field conditions reduced, with rapid recovery.

## DISPOSAL CONSIDERATIONS:

- Do not contaminate ponds, waterways or ditches with chemical or used containers.
- Surplus material must be disposed of as detailed in the 'Guidelines for the avoidance, limitation and
- Disposal of pesticide waste on the farm' GCPF, 1987.
- Empty containers should be washed and discarded.
- Empty containers should not be used for other purposes.
- Disposal should be in accordance with local, state or national legislation.

### Container disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute or make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residues from containers by triple rinsing and puncture or otherwise destroy empty containers before disposal.

## TRANSPORT INFORMATION: -

**Proper Shipping Name:** Pyrethroid insecticide liquid, flammable (Lambda-Cyhalothrin)  
**UN number:** 2903



**Class:** 6.1  
**Packing Group:** III

