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READ THE ENTIRE LABEL BEFORE USING THIS PRODUCT.

USE ONLY IN ACCORDANCE WITH INSTRUCTIONS.

KEEP OUT OF REACH OF CHILDREN

## ES 35 EC



### INGREDIENTS

Endosulphan .....35%  
Other ingredients .....65%

ES 35 EC is a non-systemic insecticide and acaricide with contact and stomach action. It is used in the control of sucking, chewing and boring insects and mites on a very wide range of crops, including fruit (including citrus), vines, olives, vegetables, ornamentals, potatoes, cucurbits, cotton, tea, coffee, rice, cereals, maize, sorghum, oilseed crops, hops, hazels, sugar cane, tobacco, alfalfa, mushrooms, forestry, glasshouse crops, etc.

### Key Benefits of ES 35 EC:

1. Broad spectrum insecticide
2. Highly effective against pests

### PRECAUTIONS

Keep the product out of reach of children, pets and food stuffs. Do not eat, drink or smoke during treatment. In case of toxication, call a veterinarian.

### SYMPTOMS OF POISONING

Irritation on skin or eyes.

### MEDICAL TREATMENT

Treatment is symptomatic.

### FIRST AID

**IF POISONING OCCURS, IMMEDIATELY CONTACT A DOCTOR OR POSIONS INFORMATION CENTER AND FOLLOW THE ADVICE GIVEN.**

**Inhalation:** If inhaled, remove to fresh air, keep

warm and at rest. Seek medical advice if inhale in large quantities.

**Skin Contact:** Carefully remove contaminated clothing and footwear. Washed affected areas with soap and water. Seek medical aid if at all worried.

**Eye Contact:** Rinse eyes immediately with clean water for at least 15 minutes and obtain medical aid.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. Seek immediate medical advice.

**First Aid Facilities:** Provide eyewash and safety shower facilities in the work place.

### DIRECTION OF USE

Crop	Pest	Application
Cotton	Whitefly cotton aphid	0.75 lbs. ai/A (1 Quart/Acre)
Alfalfa grown for seed only	Spotted alfalfa aphid	2 2/3 pints / Acre (1.0 lb. ai./A)
Clover grown for seed only	Aphids	2/3 to 1 1/3 pints/ Acre (0.25 lb to 0.50 lb ai/acre)
Seed crops only: Broccoli, cabbage, collards, Chinese cabbage, kale, mustard. Kohlrabi, radishes, rutabagas and turnips	Seedpod weevil	85 oz. per acre or 2.6 quarts
Hybrid poplar grown for pulp	Eriophyid mite	2-3 quarts per acre
Potatoes	Colorado potato beetle armyworms aphids	1 1/3 quarts per acre
Pineapples (grown for processing)	Pineapple fruit mite and insects associated with pink disease	2 quarts per acre

Apply the listed amount per acre when insects first appear and repeat as required unless otherwise noted, to maintain effective control. Use sufficient water for thorough coverage of listed crops unless otherwise noted. Coverage of upper and lower leaf surfaces is essential for good control. For ground application, apply recommended amount of insecticide in a minimum of 10 gallons of water per acre on

vegetable or row crops unless otherwise noted. Observe use limitations. If insect control is required beyond the following use patterns, supplement the control program with other suitable pesticides.

When applying this material by aircraft, mix the recommended amount with sufficient water to provide a minimum of 1 gallon of finished spray per acre on vegetable and field crops unless otherwise noted, and a minimum of 20 gallons of finished spray per acre on fruit and nut trees and on wines. Where more than 2 quarts of this material are recommended, mix with sufficient water to provide a minimum of finished spray equal to twice the amount of ES 35 EC Insecticide used. Do not plant root crops other than carrots, potatoes, sweet potatoes, and sugar beets as follow up crops.

#### DISPOSAL METHODS

Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed by use according to labels instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

#### Empty containers

Non-returnable container which held this material should be cleaned, prior to disposal by triple rinsing. Containers which held this material may be cleaned by being triple-rinsed and recycled with rinsate being incinerated. Do not cut or weld metal containers. Vapors that form may create an explosion hazard.

#### STORAGE CONDITION

Store in a cool, dry, well ventilated place. Do not use or store near heat, open flame or hot surfaces. Keep out of reach of children and animals. Store in original containers only. Carefully open containers. After partial use, replace lid and close tightly. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

#### TOXICOLOGICAL EFFECTS

Dermal LD<sub>50</sub>: 256 mg/kg (rabbit)

Oral LD<sub>50</sub>: 44.9 mg/kg (rat)

Inhalation LC<sub>50</sub>: 22 mg/L/4hr. (rat)

#### Acute effects from overexposure:

This product is highly toxic if swallowed, inhaled or absorbed through the skin. It is moderately irritating to the eyes and skin. Signs of toxicity in laboratory animals included tremors, clonic convulsions, decreased locomotion, chromorhinorrhea, and oral discharge. Inhalation

of aromatic hydrocarbon vapors may cause dizziness, disturbances in vision, drowsiness, respiratory irritation and eye, skin, and mucous membrane irritation. Vomiting after ingestion of this product may cause aspiration of aromatic hydrocarbons into lungs, which may result in fatal pulmonary edema. Exposure to butanol vapors may produce headaches, drowsiness, and irritation of the nose and throat. Excessive exposures to butanol liquid or vapor may result in contact dermatitis and irritation of the mucous membranes.

#### Chronic effects from overexposure:

No data available for the formulation. In chronic studies with laboratory animals, endosulphan caused decreased litter weights at the highest doses. Endosulphan was non-mutagenic in a battery of tests. Chronic exposure to aromatic hydrocarbons may cause headaches, dizziness, loss of sensation or feelings (such as numbness), and liver and kidney damage. Inhalation of xylene vapours at high doses has also resulted in an increased incidence of malformations and decreases in fetal weight in laboratory animals. Damage from xylene may be potential by alcohol. Disturbances in hearing and balance have been reported in workers exposed to butanol vapours.

#### ECOLOGICAL INFORMATION

Unless otherwise indicated, the data presented below are based on the active ingredients.

**Environmental data:** in natural waters, endosulphan is more readily degraded at pH 7 (half life = 5 weeks) than at pH 5.5 (half life = 5 months). The half life in soil varies with soil type and environmental conditions, with 120 days being average under agricultural conditions. The  $\alpha$ - and  $\beta$ -isomer degrade at different rates with the  $\beta$ -isomer being more persistent. Endosulphan has a slight potential is decreased with increasing organic matter content of the soil. The bioconcentration factor for endosulphan varies by species and length of exposure but is generally less than 100.

#### Ecotoxicological information:

Endosulphan is considered highly toxic to fish with LC<sub>50</sub> values of 1.0 to 10.0  $\mu$ g/L. Crustaceans and mollusks are less sensitive with LC<sub>50</sub> values of 10 to 1600  $\mu$ g/L. Endosulphan is slightly toxic to birds and oral LD<sub>50</sub> values range from 200 to 1000 mg/kg.

#### PHYSICAL PROPERTIES AND GUIDELINES

#### Physical Properties:

- ❖ Odor: Aromatic hydrocarbon

- ❖ Appearance: amber liquid
- ❖ Solubility in water: emulsifies
- ❖ Specific gravity: 1.06 @ 20°C (water = 1)
- ❖ Molecular weight: 406.95 (endosulphan)
- ❖ Weight per volume: 8.82 lb/gal. (1060 g/L)



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