

DELTRA PLUS 250EC™
MATERIAL SAFETY DATA SHEET

SECTION 1 Chemical product and Company identification

Product Name: Deltra Plus 250EC™ (Deltamethrin)

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

or

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

Chemical Family: Pyrethroid

Formula: C₂₂H₁₉Br₂NO₃

Product Use: Insecticide

SECTION 2 Composition/Information on Ingredients

<u>Product Name</u>	<u>Content (%)</u>	<u>CAS RN</u>
Deltamethrin	2.5	52918-63-5

SECTION 3 Hazards Identification

Health Effects

Acute if Ingested: Toxic if swallowed

Eye: The material should not be allowed in contact with the eyes. May be moderately irritating to the eyes.

Skin: The material should not be allowed in contact with the skin. Minimally irritating to the skin. May cause dermal sensitization or skin tingling.

Inhalation: This product may be harmful if inhaled. Avoid breathing vapour/spray/fumes.

Chronic: No data available on this formulation. In studies with laboratory animals, deltamethrin technical did not cause teratogenicity or reproductive toxicity. The overall results from a battery of genotoxicity studies indicate that deltamethrin is not genotoxic. Ames test results were negative.



SECTION 4 First Aid Measures

Ingested: If poisoning occurs, contact a doctor or Poisons Information Centre. If more than 15 minutes from a hospital, induce vomiting, preferably using Ipecac Syrup APF. Rinse mouth with water. Give plenty of water to drink. Do not induce vomiting or give anything by mouth if the patient is unconscious. Get to a hospital or doctor quickly.

Eye: Flush eyes with plenty of water for at least 15 minutes. If eye irritation persists seek medical attention.

Skin: Remove contaminated clothing and wash contact area with flowing water and soap. Launder clothing before re-use.

Inhaled: Remove from source of vapour to fresh air. If breathing discomfort occurs contact a medical doctor. If breathing stops then start artificial respiration and seek a doctor.

First Aid Facilities: Normal workplace facilities and equipment. A supply of Ipecac syrup should be kept on hand.

Advice to Doctor: The active ingredient in this product is a pyrethroid insecticide. The formulation also contains liquid hydrocarbons that can cause severe pneumonitis or fatal pulmonary oedema if aspirated. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise symptomatic and supportive. In cases of skin contact, it has been reported that topical applications of Vitamin E acetate was found to have very high therapeutic value, eliminating almost 100% of the skin pain associated with synthetic pyrethroids.

SECTION 5 Fire Fighting Measures

Degree of Hazard - Combustible liquid. Material may support combustion at elevated temperatures. Sealed, overheated containers may present an explosion hazard. Thermal decomposition and burning may produce toxic by-products.

Extinguishing Media - Soft stream water fog, Foam, CO₂ or dry chemical.

Special Fire Fighting Procedures - Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated. Try to keep containers cool with soft stream water fog.

Hazardous Decomposition Products - Carbon monoxide, carbon dioxide, hydrogen cyanide, bromine, and hydrogen bromide.

SECTION 6 Accidental release measures

In the case of spillage contain and absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as indicated below. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent, bleach or caustic) and add the solution to the drums of wastes already collected.

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Label for contents. Dispose of drummed wastes, including decontamination solution, in accord with appropriate guidelines. Do not discharge into drains.

SECTION 7 Handling and storage

Handling procedures: Avoid breathing spray mist. Do not get in eyes, on skin, or on clothing. Do not use near heat or open flame.

Storing procedures: Do not use or store near heat or open flame. Do not contaminate water, food, or feed by storage or disposal.

Work/Hygienic procedures: Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

- Discard clothing and other absorbent material that have been drenched or heavily contaminated with this products concentrate. Do not reuse them.
- For additional handling precautions, refer to the Product Label.

SECTION 8 Exposure controls/Personal protection

Exposure Standards: None

Engineering Controls: Use only in well ventilated areas

Personal Protection

Eyes: Eye protection should be worn when splashing is possible. Wear splash proof goggles or a full face shield. Consult AS 1336 and 1337. If product in eyes, wash it out immediately with water.

Clothing: When opening the container and preparing spray wear cotton overalls buttoned to the neck and wrist. Wear a washable hat. If clothing becomes contaminated with product, or wet with spray remove clothing immediately. If product or spray gets on skin, immediately wash area with soap and water.

Gloves: Avoid skin contact. Wear gauntlet style chemical protective gloves made of rubber or neoprene PVC. Inspect regularly for leaks.

Respiratory: Do not breathe vapour/spray/fumes. Use an organic-chemical cartridge respirator when working in poorly ventilated areas or where there is potential for spray mist, splashing or vapours.

Other: Do not eat, drink or smoke until after washing. Wash thoroughly after handling. After each use wash personal protection equipment, including gloves, goggles or face shield, respirator face piece and contaminated clothing.



SECTION 9 Physical & Chemical properties

Appearance: Light yellow transparent liquid

Solubility in Water: Emulsifies in water

Acidity: Maximum 0.5 g/kg calculated as H₂SO₄

SECTION 10 Stability & Reactivity

Chemical stability: Stable

Hazardous polymerization: Will not occur

SECTION 11 Toxicological Information

Oral:

- Acute Oral LD₅₀ for rats ranges from 135- > 5000 mg/kg depending upon carrier and conditions of the study; for dogs > 300mg/kg.
- Acute Oral LD₅₀ for formulation in rats: 535 mg (of 25g/L EC)/kg.

Skin and eye: Acute percutaneous LD₅₀ for rats and rabbits > 2000mg/kg.

- Non-irritating to skin
- Mild eye irritant (rabbits).

Inhalation: LC₅₀ (4h) for rats 2.2 mg/L air; (1h) > 4.6 mg/L air (micronised).

NOEL: (2y) for mice 12, rats 1, dogs 1 mg/kg b.w.

ADI: 0.01 mg/kg b.w.

Other: Non-mutagenic and non-teratogenic (mice, rats, rabbits).

SECTION 12 Ecological Information

Birds: Acute Oral LD₅₀ for Mallard ducks >4640mg/kg. Eight-day dietary LC₅₀ for Mallard ducks >8039, Quail > 5620 mg/kg diet. NOEL for reproduction for Mallard ducks > 70, Bobwhite quail > 55 mg/kg daily.

Fish: Toxic to fish under laboratory conditions; LC₅₀ (96h) for Rainbow Trout 0.91, Bluegill Sunfish 1.4µg/L. Not toxic to fish under natural conditions.

Bees: Toxic to bees, LD₅₀ (oral) 79 ng/bee, (contact) 51 ng/bee. Low LD₅₀ and LC₅₀ values under laboratory conditions do not represent a significant hazard to bees in normal field use.

Worms: LC₅₀ (14 d) for earthworms 28.57 mg/kg soil.

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SECTION 13 Disposal Considerations

Dispose of empty, used containers by triple rinsing or, preferably pressure rinsing. Add the rinsate to the spray tank or dispose of the rinsate in a disposal pit away from desirable plants and their roots and watercourses. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SECTION 14 Transport Information

DOT/IATA/IMO:

UN No.: None Allocated

Dangerous Goods Class: None Allocated

Hazchem Code: None Allocated

Packing Group: None Allocated

SECTION 15 Regulatory Information

Risk Phrases

R10 Flammable.

R20/22 Harmful by inhalation and if swallowed.

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S35 This material and its container must be disposed of in a safe way.

S39 Wear eye/face protection.

S57 Use appropriate container to avoid environmental contamination.

S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

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SECTION 16 Other Information

The information contained in the Material Safety Data Sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for use with other materials or in processes other than those specifically described herein.

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