

IS 11996:1987 Specification for Deltamethrin

Deltamethrin is a kind of synthetic pyrethroids insecticide used worldwide in agriculture for home pest control and protection of foodstuff and disease vector control.

Deltamethrin EC is a chemical pesticide with a specific active ingredient content of 2.8% to 5.6% w/w (depending on the formulation).

The material must meet several physical and chemical requirements for Deltamethrin EC. Physically, it should be a yellow to brown, homogeneous, and stable liquid with minimal sediment. It must form a stable emulsion when diluted with water and pass cold tests without turbidity or separation at low temperatures. The flash point should exceed 24.5°C, and emulsion stability must not exceed 2.0 mL of separation in 100 mL of emulsion. Chemical requirements specify that the Deltamethrin content must match the declared nominal value within specified tolerance limits: $\pm 10\%$ for up to 9%, $\pm 5\%$ for higher concentrations.

IS 11996 ensures that deltamethrin EC formulations are of high quality, safe to use, and effective in controlling pests, with strict guidelines for production, packaging, and testing to maintain consistency and safety in agricultural and public health applications.