

SUMMARY

IS 15939: 2011 Pesticide - Bifenthrin Wettable Powder - Specification

Bifenthrin Wettable Powder is used as an insecticidal formulation. It is generally manufactured to contain 10 percent (m/m) of bifenthrin.

This Indian Standard specifies the requirements for **Bifenthrin Wettable Powder (WP)**, a pesticide formulation, covering **composition**, **physical properties**, **chemical content**, **packaging**, **labelling**, and **testing procedures** to ensure the product is effective, safe, and of consistent quality.

The primary constituent is **Bifenthrin technical**, along with suitable carriers, stabilizers, binders, and other formulants. The product must wet readily when mixed with water to form a spray suspension. The **bifenthrin content** must meet specified tolerances, with deviations allowed based on the nominal value of the **active ingredient**. For nominal values up to 9%, the tolerance is $\pm 10\%$, and for values above 50%, it is $\pm 5\%$. This verifies that the active ingredient is present in the correct concentration as declared on the product label ensuring that the pesticide performs effectively, complies with regulations, and does not pose risks to human health or the environment.

The standard also sets requirements for key **physical properties**, including a maximum of 3% passing through a 300-mesh sieve, a **wettability time** of 120 seconds, and a **suspensibility** of at least 60%. The **pH** of a 5% suspension must fall between 7.0 and 9.0, and **alkalinity** must not exceed 0.3%. These parameters ensure uniform application, stability, and proper interaction with water.

The material should be **packaged** in leak-proof, pilfer-proof polyethylene pouches or containers, with appropriate liners for bulk quantities to ensures product integrity during transport and storage. The **labelling** must include the product name, manufacturer details, batch number, nominal **bifenthrin content**, and **safety instructions**, complying with the **Insecticides Act**, 1968.

Sampling and testing procedures prescribed in the standard are to be conducted within 90 days of manufacture, as per IS 10627: 1983, to confirm compliance to the standard ensuring the product remains effective and safe throughout its shelf life.