IS 15848:2009 (Zinc Sulphate, monohydrate, agricultural grade)

IS 15848: 2009 specifies the quality requirements and testing methods for agricultural-grade zinc sulfate monohydrate, an essential micronutrient used as a fertilizer in agriculture. Issued by the Bureau of Indian Standards (BIS), this standard supports agricultural practices by ensuring the quality and effectiveness of zinc sulfate, which is critical for crop growth.

Zinc sulfate monohydrate, as per this standard, must be in the form of a dry, free-flowing powder or crystals, containing at least 33% zinc by mass. The product must also meet specific limits for impurities such as zinc, magnesium, copper, lead, iron, and matter insoluble in water, as these could affect its efficacy or harm crops. The pH of a 5% solution should be no less than 4.0 to maintain stability and solubility in agricultural settings.

The standard prescribes the use of clean, securely closed packaging, with all containers marked with essential information such as the product name, zinc content, manufacturer details, batch number, and net weight. This labeling aligns with the Fertilizer Control Order (FCO) requirements, ensuring traceability and compliance with regulatory standards.

Testing is conducted on samples to assess their conformity with these specifications, with tests for zinc content, magnesium, copper, and other characteristics performed on composite samples.

By setting these guidelines; IS 15848: 2009 ensures that zinc sulfate monohydrate fertilizers meet quality and safety standards, promoting healthier crop production and providing farmers with a reliable product for effective soil enrichment.