



Indian Standard IS 2568 : 1978 Malathion Dusting Powder Summary

Malathion dusting powders are a widely used **insecticide formulation** designed to control a range of **agricultural pests, including aphids, beetles, and mites**. Malathion, the active ingredient, is an organophosphate insecticide with relatively low toxicity to humans compared to other organophosphates, making it popular for use on fruits, vegetables, and in public health for mosquito control. When used as a dusting powder, malathion can be applied directly to plants or soil, allowing it to work through contact or ingestion by pests. This method provides targeted pest control, minimizing pesticide runoff and contamination of water sources, but still requires careful handling due to potential risks to non-target organisms, particularly pollinators and aquatic life.

This standard **IS 2568**, a standard that specifies guidelines for formulation, safety, and application. IS 2568 addresses critical aspects such as

- **Product Composition**—ensuring the concentration of malathion is consistent and effective without excess toxicity. Key specifications include **Melathion Content** which shall not be less than that of declared nominal content, **high temperature stability at 90 degree C**, **fineness**, **bulk density**, **acidity and alkalinity of maximum 0.1 percent**.
- **Labelling requirements**- that mandate clear usage instructions, safety warnings, and protective measures for handlers. This is crucial for ensuring that users understand the risks and proper application procedures. **Mild steel or tin plate or fibreboard containers** are allowed to use for packaging of **Malathion**.
- **Application protocols**- that help minimize human exposure and environmental contamination.

IS 2568 guidelines emphasize the importance of safe storage and disposal practices, as malathion dusting powders can still pose health risks through skin contact or inhalation, particularly with prolonged exposure. Additionally, IS 2568 supports the responsible application of malathion by recommending precautions to protect beneficial insects and prevent excessive environmental buildup. Adhering to IS 2568 helps ensure that malathion dusting powders are used effectively and safely, reducing risks associated with pesticide exposure while maximizing their benefits for pest control in agriculture. With ongoing advancements in integrated pest management (IPM), malathion dusting powders remain a component of pest management programs, but there is an increasing shift toward alternative methods to ensure both agricultural productivity and environmental sustainability.