

## IS 9665:1981 PROPOXUR EMULSIFIABLE CONCENTRATES

**Propoxur Emulsifiable Concentrate** is a liquid pesticide containing Propoxur, a carbamate **insecticide**, designed to control pests in the fields of agriculture and public health. This concentrate is intended to be mixed with water, forming a stable, milky emulsion for easy and effective application. The product is expected to provide reliable **pest control** while maintaining stability under various environmental conditions.

A high-quality, reliable product that is free from impurities and easy to apply is desired by the farmer. The concentrate should retain its effectiveness even under higher or lower temperatures and remain stable without separating or degrading when mixed with water. In addition, the product must come in secure packaging with clear **labelling**, which includes important information such as the shelf life, manufacturer details, Propoxur content, usage instructions, and safety precautions. This ensures safe handling and proper application.

To ensure that these expectations are met, **IS 9665: 1981** provides detailed technical requirements for **Propoxur Emulsifiable Concentrates**. Key test parameters include the active ingredient content, which must be **20% (m/m) Propoxur**, with specified tolerance limits. The concentrate must also pass tests for physical appearance, ensuring it is a clear, homogeneous liquid without any **foreign particles or visible impurities**. The concentrate must form a stable emulsion when mixed with water, which is tested by observing the mixture for separation or degradation over time. In addition, the product must demonstrate **stability**, meaning it should retain its effectiveness when exposed to high temperatures (e.g., 40-50°C) or lower temperatures, 10°C or lower for extended periods.

The **acidity/alkalinity** of the concentrate is also tested, with the pH needing to fall within a specified range to ensure proper formulation stability and performance. Furthermore, the product is tested for foreign matter and impurities, ensuring it is free from contaminants that could affect its **effectiveness**. The packaging integrity is also checked to ensure the product remains protected from contamination or degradation during storage and transport. Product's labelling compliance is assessed to ensure that it meets all regulatory requirements set by the **Insecticides Act, 1968.** Labels must include essential information such as safety warnings and usage instructions for proper handling.