



IS 3470 : 2017 - Hexane, Food Grade

The product discussed in **IS 3470: 2017** is **food-grade hexane**, which is a **petroleum distillate** mainly composed of **n-hexane**. This solvent is widely used for the **extraction of vegetable oils** from oleaginous materials. It is a **clear, colourless liquid** with a characteristic petroleum odor, free from sediment and moisture, making it suitable for food-related applications (IS 3470).

Consumers expect certain **quality parameters** from food-grade hexane, such as:

- **Purity:** It should contain minimal contaminants like **sulphur** (≤ 5 mg/kg) and **benzene** ($\leq 0.05\%$).
- **Safety:** A low **non-volatile residue** (≤ 0.0005 g/100 ml) ensures that no harmful substances remain in the extracted oils.
- **Odor:** A petroleum-like odor without being overpowering is crucial.
- **Compliance with food safety standards:** It should meet stringent guidelines for aromatic and polycyclic aromatic hydrocarbons (PAHs), ensuring it is safe for food use (IS 3470).

The **IS 3470: 2017 standard** addresses these expectations by specifying strict testing methods and requirements, such as:

- **Distillation range** to control the purity and boiling point.
- Limits on **aromatic compounds** and **PAHs**, aligned with international food safety regulations, ensuring minimal contamination.
- Tests for **non-volatile residues** and **refractive index** to guarantee product quality. By setting such rigorous standards, it ensures the safety, quality, and reliability of food-grade hexane, catering to consumer demands for high-quality, safe solvents (IS 3470) (IS 3470).