



## **IS 10325:2000 SQUARE TINS FOR FOOD PRODUCTS**

Proper **storage** of food products helps to preserve the **quality** and **nutritional value** of the foods stored for long time, and also prevents from **spoilage** and **deterioration**. Proper food storage can help prevent **foodborne illnesses** caused by **harmful bacteria**. This Indian standard, IS 10325 outlines the specifications for **square tins** intended for **packaging 15 kg/liter** of **ghee, vanaspati, edible oils, and bakery shortenings**. The standard encompasses various aspects of the tins, including **dimensions, materials, manufacturing processes, testing procedures, and marking guidelines**. It emphasizes the use of high-quality materials and robust construction to ensure the **safe** and **reliable** storage of these food products.

Consumers expect these square tins to possess several key quality parameters:

- **Durability:** The tins should be strong enough to withstand **handling, transportation, and stacking** without deformation or leakage.
- **Safety:** The materials used in the construction of the tins, including the tinplate, solder, and sealing compound, must be **food-grade** and **non-toxic** to ensure the safety and quality of the packaged food products.
- **Functionality:** The tins should be easy to fill, seal, open, and dispose of. The closure mechanisms must be reliable and secure to prevent leakage or contamination.
- **Aesthetics:** While primarily functional, the tins should have a **clean** and presentable appearance, free from **rust** or **foreign** materials.

The standard addresses these expectations by specifying the **materials, construction, and testing procedures**. It mandates the use of single or double cold-reduced **electrolytic tinplate** with a specific tin coating thickness. The manufacturing process includes provisions for **side seam welding** or **soldering**, reinforced by **embossing** or **panelling** on all sides and ends for **added strength**. Rigorous testing procedures, including **air pressure, handle pull, and hydraulic pressure tests**, ensure the tins meet the required standards for **strength, durability, and leak-proof** performance. Furthermore, the standard stipulates that the tins should be supplied in new and clean condition, free from **rust** and **foreign** materials. Indian standard also includes provisions for marking the tins with the manufacturer's details and the BIS certification mark, providing assurance of **quality** and **safety** compliance with the standard.