



IS 17569:2021 Insulated Containers for Food Storage

The Indian Standard IS 17569:2021 outlines the specifications for insulated containers designed to store hot or cold food for domestic use, with capacities up to 20 ltrs. These containers help maintain the temperature of food items and are commonly used as casseroles, lunch boxes, or hot/cold boxes. The various types of containers covered under the Standard are- Plastic exterior with stainless steel interior, Plastic on both sides, Lids can be stainless steel, plastic, or glass. Material of the Inner containers should be food-grade stainless steel (Grade 304). Outer cases must be durable, corrosion-resistant, and protect against regular wear. If plastic is used, it must be BPA-free and food-grade. Thermal insulation materials, such as Polyurethane Foam (PUF), must be safe and non-hazardous. The Standard stipulates following tests on insulated containers-

- **Heat Retention:** Containers must maintain specific temperatures for 1 to 24 hours depending on size (e.g., retain at least 40°C after 24 hours for 1-liter containers).
- **Cold Retention:** Water should not exceed 12°C after 6 hours.
- **Impact Resistance:** Containers are tested for durability through drop and pendulum impact tests.
- **Leakage Prevention:** Strict tests ensure no water seeps out or into the insulation.
- **Design Requirements:** Containers must be easy to clean, Stability tests ensure containers don't tip over on slightly inclined surfaces. Handles and shoulder straps (if provided) are tested for strength and durability.

Markings and Certification:

- Each container must display capacity, material grade, insulation type, and whether it is microwave-safe.

Products meeting the standard can bear the BIS certification mark

This standard ensures that insulated containers meet quality, safety, and performance requirements to provide consumers with reliable food storage solutions.