



## **Summary of IS 6312: 1994, Polyethylene containers for the transport of materials - Specification**

With the growth of indigenous packaging industry, polyethylene containers are replacing conventional containers made of materials, such as glass, metal, etc. Polyethylene containers offer several benefits for the packaging and transport of materials considering its following traits 1) **Durability and Impact Resistance** 2) **Lightweight**, 3) **Cost-Effectiveness** 4) **Chemical Resistance** 5) **Flexibility and Versatility** 6) **Moisture and Weather Resistance** and 7) **Sustainability**.

Overall, polyethylene containers offer a balance of strength, versatility, and cost savings, making them a valuable choice for packaging and transporting a wide range of goods in the industry.

This Indian Standard IS 6312 was first published in 1971 and covered polyethylene containers for transporting liquids only. The first revision of the standard in 1980 broadened the scope to cover requirements if the containers are used for the transportation of liquid, semisolid and solid materials. The polyethylene containers were classified according to their use than their construction. The specification for polyethylene containers for the transport of materials typically includes standards and guidelines to ensure containers are safe, durable, and suitable for transportation purposes.

Key aspects of this Indian Standard include:

**Material Requirements:** Specifies the grade and quality of polyethylene to ensure durability and resistance to chemicals.

1. **Design and Construction:** Standards for thickness, shape, and structural integrity to withstand transportation stress and prevent leaks or ruptures.
2. **Capacity and Size:** Defines acceptable sizes and volumes for various transport needs, from small containers to large drums.
3. **Testing Procedures:** Guidelines for drop tests, pressure tests, and other performance tests to verify container strength and leak resistance.
4. **Labelling and Marking:** Requirements for clear labelling, including capacity, handling instructions, and safety symbols.
5. **Safety and Compliance:** Adherence to local and international standards to ensure safe transport of hazardous and non-hazardous materials.

These specifications ensure polyethylene containers are safe, efficient, and compliant for transporting materials in various industries. **Consumers expect** the standard addresses these expectations by setting strict limits on impurities, ensuring accuracy in testing, and outlining clear safety and packaging protocols.

**Compliance** to the requirements prescribed in the standard ensures a good quality product which meets the expectations of the consumers.