



Indian Standard IS 1381 (Part 1): 2003 – Laboratory Glassware: Narrow-Necked Boiling Flasks

This **Indian Standard (IS 1381-Part 1)**, aligned with **ISO 1773:1997**, outlines the specifications for **narrow-necked boiling flasks**, including **conical, flat-bottomed, and round-bottomed** varieties, for **general laboratory use**. These flasks are designed for **direct laboratory application** and are **compatible with other equipment**, making them suitable for **further processing** as needed. The standard provides a series of **nominal capacities** for these flasks, which include **25, 50, 100, 250, 500, 1000, 2000, 3000, and 5000 ml**.

The flasks are made from **borosilicate glass**, as specified by **ISO 3585**, which offers **high thermal and chemical resistance**. This material should be **free of visible defects and internal stress** to ensure **durability and effective performance** in laboratory conditions. The flasks are constructed to be **stable**, standing **vertically without rocking or spinning** on a level surface. The **neck of each flask** is designed to be **circular in cross-section** with minimal **bell-mouthing** at the top and should have **strengthened edges** for enhanced durability.

For marking, each flask must have a **permanent and legible inscription** indicating its **nominal volume** (such as “100 ml”) and the **maker’s or vendor’s name or mark**. Additionally, each flask should have a **designated area for marking with a pencil**, and it is recommended that each flask **reference this International Standard**.

Overall, **IS 1381 (Part 1): 2003** ensures that narrow-necked boiling flasks meet **high standards for quality and compatibility** in laboratory environments, providing **reliable and durable glassware** for scientific use.