

A [glass Erlenmeyer flask](#) is one of the most commonly used pieces of laboratory equipment in scientific research, educational laboratories, and industrial applications. Recognized by its conical body, flat bottom, and narrow neck, this flask is designed to facilitate mixing, heating, and storing liquids while minimizing the risk of spills. Made from high-quality borosilicate glass, Erlenmeyer flasks offer excellent resistance to heat, chemicals, and thermal shock.

Key Features of a Glass Erlenmeyer Flask

The unique shape of a glass Erlenmeyer flask allows liquids to be swirled and mixed efficiently without splashing. Its narrow neck helps reduce evaporation and contamination, making it ideal for chemical reactions and microbial culture work. Many flasks also feature graduated markings that provide approximate volume measurements for added convenience.

Applications in Laboratories

Glass Erlenmeyer flasks are widely used in chemistry, biology, pharmaceutical, and environmental laboratories. They are commonly utilized for preparing solutions, conducting titrations, culturing microorganisms, and storing samples. Their versatile design makes them suitable for both routine laboratory procedures and advanced research applications.

Advantages of Borosilicate Glass Construction

Most glass Erlenmeyer flasks are manufactured from borosilicate glass, which offers exceptional durability and resistance to chemical corrosion. This material can withstand high temperatures and sudden temperature changes, making the flask suitable for direct heating and sterilization processes such as autoclaving.

Available Sizes and Capacities

Glass Erlenmeyer flasks are available in a wide range of capacities, typically ranging from 25 mL to 5000 mL or more. The variety of sizes allows laboratories to choose the appropriate flask for small-scale experiments, medium-volume preparations, or large-scale sample processing.

Cleaning and Maintenance

Proper cleaning is essential to maintain the performance and longevity of a glass Erlenmeyer flask. After use, the flask should be rinsed thoroughly with suitable cleaning solutions and deionized water. Regular inspection for cracks, chips, or signs of wear helps ensure safe laboratory operation and accurate experimental results.

Why Choose a Glass Erlenmeyer Flask?

A glass Erlenmeyer flask remains a preferred choice in laboratories due to its durability, versatility, and ease of use. Its efficient design supports accurate mixing, heating, and storage of liquids, making it an indispensable tool for scientific and industrial applications where reliability and precision are critical.