

## Heating Mantle



A Heating Mantle is a laboratory device used for uniform heating of liquids in round-bottom flasks. It provides controlled heating without direct flame exposure, making it ideal for chemical, pharmaceutical, and research applications.

### Key Features:

- Fabric or metal heating element for even heat distribution.
- Adjustable temperature control for precise heating.
- Prevents thermal shock to glassware.
- Available in different capacities (50 mL to 5 liters or more).

### Working Principle:

1. The flask is placed inside the hemispherical heating chamber.
2. The heating element warms up, providing gentle and uniform heat.

3. No direct flame, reducing the risk of overheating or sample degradation.

Applications:

- Chemical & Pharmaceutical Labs – Heating organic reactions, distillation.
- Research & Academia – Solvent evaporation, reflux heating.
- Petroleum & Food Industry – Sample analysis, quality testing.