

## Adiabatic Batch Reactor



**Product Categories:** [Chemical Reaction Engineering Lab](#), [Engineering Equipment](#)

**Product Page:** <https://www.labappara.com/product/adiabatic-batch-reactor/>

### Product Description

#### Adiabatic Batch Reactor

##### Technical Description:

An adiabatic batch reactor is a closed system with no input and output streams. This reactor is operated under conditions like adiabatic (Temperature of Reaction Mass keep on changing), perfectly mixed (composition of reaction mixture is uniform throughout), and constant volume (volume of the reaction mixture within the reactor remains constant, there is no appreciable change in the density of reaction mass).

This set-up is used to study a catalytic homogeneous reaction under adiabatic condition. The set-up consists of a Dewar flask of capacity 1 lit. fitted with a stirrer. The flask is double insulated by ceramic wool insulation. Temperature is measured by digital temp indicator. The whole setup is mounted on a rigid M.S. frame.

##### Technical Specifications:

Reactor: Material Stainless Steel, Capacity 1 Ltrs. (Approx) Insulated with Ceramic wool.

Stirrer :Ptfе Impeller and Stainless Steel shaft coupled with FHP motor

Temperature Sensors: RTD PT-100 type.

The whole set-up is ingeniously designed and schematically arranged on a powder-coated rigid structure.

Control Panel:

Digital Temp. Indicator : 0-199.9°C, RTD PT-100 type

Standard make on/off switch, Mains Indicator etc.

Temp. Sensors : RTD PT-100 type