

# Educational Lab Equipments





Product Code . EL-TWL-11790

# **Adiabatic Batch Reactor**

### Description

### **Adiabatic Batch Reactor**

#### **Description:-**

An adiabatic batch reactor is a closed system with no input and output streams.

The set-up consists of a Dewar flask of capacity 1 lit. fitted with a stirrer.

This reactor is operated under conditions like adiabatic (Temperature of Reaction Mass keep on changing), Perfectly mixed (composition of the 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).

The flask is double insulated by ceramic wool insulation. Temp. is measured by digital temp indicator.

The whole setup is mounted on a rigid M.S. frame.

This set-up is used to study a catalytic homogeneous reaction under adiabatic condition.

### **Experimentation:-**

To predict the degree of conversion from time-temperature data.

To study the decomposition of Hydrogen Peroxide with water in presence of an lodide catalyst. { "@context": "https://schema.org/", "@type": "Product", "name": "Adiabatic Batch Reactor", "image": " http://www.educational-

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