

CRE-003 ADIABATIC BATCH REACTOR



DESCRIPTION : Adiabatic batch reactor is simple, needs little supporting equipment and therefore ideal for small scale experimental studies on reaction kinetics. Industrially it is used when relatively small amounts of material are to be treated.

RANGE OF EXPERIMENTS

1. Study of Adiabatic Batch Reactor.
2. To calculate the reaction rate constant k for given reaction in Adiabatic batch reactor

EXPERIMENTAL SETUP :

Reactor	:	Material Stainless steel (SS) ,
Water Bath	:	Material SS , Double Wall , Insulated with glass wool
Heater	:	Nichrome wire heater
Stirrer	:	1 No.SS impeller and shaft coupled to
Digital Temp Indicator	:	0F H-P 2 0M0o 0t oCr, Indicator cum Controller.
Temp Sensor	:	CR /AL Type.
Stop watch	:	Electronic
Piping	:	SS , PVC
Setup Mounting	:	On sturdy MS stand with powder coated

CHEMICALS REQUIRED : NaOH, Ethyl Acetate ,HCL ,
Phenolphthalein indicator , Distilled water

SERVICE REQUIRED : Water Supply : @ 2 lpm
Power Supply : 230 V, 50 Hz, A.C.

SPACE REQUIRED : 1 m. (L) x 1.0 m (W) X 1 m (H).

WEIGHT : @ 45 Kg