

Product Name :
Batch Enzyme Reactor

Product Code :
NLAB-TECHNICALAB15001



Description :

Batch Enzyme Reactor

Technical Specification :

Hydrolytic Reactions are done through the enzyme dissolved in the aqueous medium. This technology is used in enzyme process. Enzyme Reactors can be operated batch-wise or continuously or through fed-batch.

There are three types of Reactors used in enzyme mediate conversions.

1. Stirred Tank Reactors
2. Membrane Reactors
3. Continuous Flow Reactors

Stirred Tank Reactors:

Stirred Tank Reactors are simple to use in batch mode and comprises of a tank. This tank consists of a stirrer and fixed baffles which can improve mixing. Stirred tank is also used in free enzymes. It holds some arrangements to maintain temperature, pH, etc. of the reaction mix.

Membrane Reactors:

Membrane Reactors have a membrane such as Membrane Reactors to retain the enzyme. It has a hollow fiber to contain the enzyme. These are easy to install and can use more than one enzyme.

Continuous Flow Reactors:

It's reactor volume is 5-10 times the volume of immobilized enzyme. Continuous Flow Reactors are available at low price and gives high productivity.

We provide you the best quality at cheap cost as we are the leading **Batch Enzyme Reactor manufacturer and supplier**. Our brand is popular world-wide and provides optimum performance.

Specification

- A bench top unit comprising a vacuum formed ABS plastic plinth with integral electrical console onto which is mounted the stirred reactor vessel sampling circuit with peristaltic pump, tubular coil heat exchanger and polarimeter device. A temperature sensor and heater mounted in the reactor vessel and linked to a PID controller for accurate reaction temperature control.
- A temperature sensor and heater mounted in the reactor vessel and linked to a PID controller for accurate reaction temperature control. A polarimeter device measuring optical transmission and angle of rotation.
- A polarimeter device measuring optical transmission and angle of rotation. Protection devices for all electrical circuits.
- Protection devices for all electrical circuits. Three displays: PID temperature control (reactor temperature),
- Three displays: PID temperature control (reactor temperature), display for angle of rotation, display for optical transmission or temperature at polarimeter.
- Sensor signals are routed to the I/O port for connection to a PC.
- Comprehensive instruction manual with detailed laboratory teaching exercises.

Instructional Capabilities:

- Understanding the principles of batch enzyme kinetics.
- Understanding the factors affecting enzyme performance
- Understanding the principles of polarimetry and Biot's law

Naugralabequipments

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