Product Code . EL-TWL-11782

Plug Flow Reactor (Coiled Tube Type)

Description

Plug Flow Reactor (Coiled Tube Type)

Description:-

In an ideal Plug Flow Reactor (Coiled Tube Type) there is no mixing in the direction of flow and complete mixing perpendicular to the direction of flow.

The concentration of reactants varies along the length of the reactor but not in radial direction.

The set up consists of two feed tanks through which two reactants are fed to the reactor.

It is a helical coil tube type reactor.

The flow rate can be adjusted by operating the needle valves provided on respective Rotameter.

Rotameters are provided to measure the individual flow of Chemicals.

In case of a coil turbulence is introduced due to frequent change in direction of flow and presence of secondary flow, so a higher value of reaction rate constant is expected in the coil tube type plug flow reactor.

The magnetic drive pump is used for circulation of feed.

Reactants enter at the lower end coming out of the top of the coil from where samples are collected for analysis.

This set up is used to study a non-catalytic homogeneous reaction under isothermal condition.
{ "@context": "https://schema.org/", "@type": "Product", "name": "Plug Flow Reactor (Coiled Tube Type)", "image": "http://www.educational-equipments.com/images/catalog/product/107905788PlugFlowReactor(CoiledTubeType)Withlogo.jpg", "description": "In an ideal Plug Flow Reactor (Coiled Tube Type) there is no mixing in the direction of flow and complete mixing perpendicular to the direction of flow. The concentration of reactants varies along the length of the reactor but not in radial direction. The set up consists of two feed tanks through which two reactants are fed to the reactor. It is a helical coil tube type reactor. The flow rate can be adjusted by operating the needle valves provided on respective Rotameter. Rotameters are provided to measure the individual flow of Chemicals. In case of a coil turbulence is introduced due to frequent change in direction of flow and presence of secondary flow, so a higher value of reaction rate constant is expected in the coil tube type plug flow reactor. The magnetic drive pump is used for circulation of feed. Reactants enter at the lower end coming out of the top of the coil from where samples are collected for analysis. This set up is used to study a non-catalytic homogeneous reaction under isothermal condition.", "brand": "Educational Lab Equipments", "sku": "5", "gtin8": "5", "gtin13": "5", "gtin14": "5", "mpn": "5", "aggregateRating": { "@type": "AggregateRating", "ratingValue": "5", "bestRating": "5", "worstRating": "0", "ratingCount": "15" } }

Educational Lab Equipments,
#449, HSIIDC, Industrial Area, Saha, Haryana
Direct Contact Details +91-98173-19615 sales@educational-equipments.com
www.educational-equipments.com