

Solid-Liquid Extraction (Packed Bed Type)



Product Categories: [Engineering Equipment](#), [Mass Transfer Lab](#)

Product Page: <https://www.labappara.com/product/solid-liquid-extraction-packed-bed-type/>

Product Description

Solid-Liquid Extraction (Packed Bed Type)

Technical description:

This setup is designed to study the performance characteristics of solvent extraction of a particular component from a packed bed of solid material. The apparatus allows study of such systems as water/inorganic salts, water/sugar bed, ethylene chloride/vegetable oil etc. The glass column is fitted with ss mesh to support the solid material.

The solvent is introduced near the bottom of the column and it flows upward counter-currently to the solids. A pump supplies the solvent and flow rate is monitored by means of a rota meter. Solvent feed tank is kept in a bath fitted with heater and digital temperature controller is used to maintain the constant temperature.

Technical specifications:

Extraction column: material borosilicate glass.

Solvent flow measurement: rota meter.

Solvent tank: made of stainless steel, capacity 30 ltrs. Double wall.

Solvent circulation: magnetic pump made of polypropylene to circulate solvent.

Heater: nichrome wire heater

Temperature sensor: rtd pt-100 type.

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