High Purity Pfa Chromatography Column Double Layer Constant Pressure Filtration System With Sieve Plate For Strong Acid Resistance

Item Number: PL-CP394

Introduction

Optimize trace analysis with this high-purity PFA chromatography column. Featuring a double-layer constant pressure design and integrated sieve plate, it provides superior acid resistance and replaces traditional glass sand cores for demanding laboratory and industrial filtration applications worldwide.

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Application	Description	Key Benefit
Semiconductor Processing	Filtration and purification of high-purity photolithography chemicals and etching reagents.	Prevents metallic ion contamination in ultra-clean environments.
Geochemical Trace Analysis	Column separation of rare earth elements and isotopes from mineral samples dissolved in strong acids.	Withstands concentrated HF and HNO3 while maintaining low background levels.
Nuclear Medicine	Separation of radioactive isotopes for diagnostic and therapeutic pharmaceutical production.	High radiation resistance and easy decontamination of PFA surfaces.
Environmental Testing	Sample preparation for the detection of heavy metals in wastewater and industrial effluents.	Replaces glass to eliminate silica leaching and sample absorption.
Pharmaceutical Synthesis	Fine chemical filtration during the synthesis of aggressive or high-purity active ingredients.	Ensures batch consistency and prevents chemical reaction with vessel material.
Petrochemical Research	Analysis of corrosive catalysts and heavy oil fractions in high-temperature environments.	Maintains structural integrity at elevated temperatures up to 260°C.
Battery Technology R&D	Processing of electrolyte materials and high-purity lithium salts for next-generation energy storage.	Superior resistance to organic solvents and reactive chemical species.

Parameter	Specification Detail (Model: PL-CP394)
Material Construction	100% High-Purity Perfluoroalkoxy (PFA)
Design Configuration	Double-layer, Constant Pressure Chamber Design
Filtration Interface	Integrated PFA Sieve Plate (Replaceable or Fixed)
Alternative Capability	Direct Replacement for Porous Glass / Sand Core Filters
Temperature Range	-200°C to +260°C (-328°F to +500°F)
Chemical Resistance	Universal (including Hydrofluoric, Nitric, and Sulfuric Acids)
Dimensions (Diameter/Height)	Fully Customizable Based on Project Requirements
Sieve Plate Pore Size	Bespoke Machined to Specification
Connection Types	Threaded, Flanged, or Push-fit PFA Connections Available
Surface Finish	High-Precision CNC Machined Mirror Surface