

Custom Ptfе Reaction Lid With Integrated Valve And Fitting Corrosion Resistant No Leaching Pfa Fep Bottle Cap System

Item Number: PL-CP326



Introduction

Custom PTFE reaction lids with integrated valves and fittings for PFA/FEP bottles. Engineered for zero leaching and ultimate chemical resistance, ensuring trace-level purity in aggressive synthesis and corrosive laboratory environments across specialized industrial applications.

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Application	Description	Key Benefit
Graphene Oxide Synthesis	Handling concentrated sulfuric acid and potassium permanganate during the oxidation process.	Total resistance to strong oxidants without vessel degradation.
Trace Metal Analysis	Preparation and digestion of samples for ICP-MS or ICP-OES analysis in environmental labs.	Eliminates metal ion leaching, ensuring the highest data accuracy.
Semiconductor Grade Chemicals	Dispensing and transferring high-purity etching solutions like hydrofluoric acid (HF).	Prevents ionic contamination and maintains ultra-high purity levels.
ZIF-8@GO Composite Prep	Acid washing and high-purity chemical processing during advanced material synthesis.	Protects the chemical purity of composite materials from impurities.
Pharmaceutical Synthesis	Reacting sensitive organic precursors in a fully inert environment with controlled gas flow.	Prevents solvent absorption and maintains batch-to-batch consistency.
High-Purity Solvent Storage	Utilizing the valve system to draw solvents without exposing the bulk material to air.	Maintains reagent dryness and prevents moisture or particulate ingress.
Corrosive Fluid Transfer	Managing the flow of aggressive industrial fluids through tubing and integrated valves.	Robust durability in continuous-use industrial fluid handling systems.

Specification Category	Details for PL-CP326 Series
Model Identification	PL-CP326
Material Construction	High-Purity PTFE / PFA (Customizable)
Configuration Type	Fully Customized Reaction Lid System
Fitting Compatibility	NPT, Flare, Compression, or Custom Threaded Ports
Valve Options	Integrated PTFE Needle Valves, Diaphragm Valves, or Stopcocks
Bottle Compatibility	Optimized for PFA / FEP Reagent and Reaction Bottles
Dimensional Data	Custom-machined to client-specified bottle neck sizes
Port Count	Single, double, triple, or multi-port configurations available
Leaching Profile	Trace analysis grade; virtually zero metallic or organic extractables
Temperature Range	Typically -200°C to +260°C (Depending on specific configuration)
Customization Scope	Port placement, dip tube length, valve type, and material grade