

High Purity Pfa Gas Washing Bottle Corrosion Resistant Gas Absorption Vessel Ptfе Cap Customizable Pfa Reaction Bottle

Item Number: PL-CP413



Introduction

Engineered for extreme chemical environments, this high-purity PFA gas washing bottle features a precision-fitted PTFE cap. Ideal for trace analysis and corrosive gas absorption, this customizable system ensures zero contamination and superior reliability in demanding laboratory workflows.

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Application	Description	Key Benefit
Trace Metal Analysis	Used to scrub carrier gases or store high-purity reagents for ICP-MS sample preparation.	Zero metal ion leaching ensures analytical accuracy.
Humidity Regulation	Fine gradient regulation of carrier gas humidity by passing gas through specific absorption ratios.	More uniform and stable humidity compared to atomization.
Semiconductor Etching	Handling and delivery of ultra-pure gases used in wafer cleaning and etching processes.	Maintains the extreme purity levels required for sub-micron fabrication.
Corrosive Gas Scrubbing	Neutralizing acidic or basic exhaust gases from chemical reactors before they reach sensitive sensors.	Exceptional resistance to aggressive acids like HF and HCl.
Pharmaceutical Synthesis	Serving as a reaction vessel for volatile intermediates that require a contamination-free environment.	Prevents organic solvent penetration and maintains solvent purity.
Environmental Monitoring	Capture and absorption of trace pollutants from atmospheric air samples for laboratory testing.	Reliable capture without side-reactions with the vessel walls.
Battery Research	Controlling moisture content in inert atmosphere glove boxes or during electrolyte testing.	Precise simulation of diverse climatic conditions from dry to humid.

Feature	Specification Details (Model PL-CP413)
Product Identifier	PL-CP413 Series
Vessel Material	High-Purity Perfluoroalkoxy (PFA)
Cap/Closure Material	Polytetrafluoroethylene (PTFE)
Volume Capacity	Fully Customizable (Tailored to client specifications)
Temperature Range	-200°C to +260°C
Chemical Compatibility	Universal (Acids, Bases, Solvents, Reactive Gases)
Port Configurations	Custom-defined (Inlet/Outlet sizing and fitting types)
Internal Diffuser	Optional / Customizable (Sintered PFA or custom-drilled tubes)
Dimensions	Bespoke sizing available via CNC fabrication
Trace Metal Background	Optimized for Ultra-Trace Analysis (ppb to ppt levels)
Sealing Mechanism	Threaded PTFE Cap with high-integrity gasket/seal options