

Semiconductor Grade High Purity Pfa Sampling Bottles For Ultra Pure Reagent Storage And Trace Analysis

Item Number: PL-CP408



Introduction

High-purity PFA sampling bottles engineered for semiconductor grade ultra-pure reagent storage and trace analysis, offering exceptional chemical inertness, minimal metal ion leaching, and a smooth interior surface to ensure sample integrity and reliable analytical data reproducibility and accuracy.

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Application	Description	Key Benefit
Semiconductor Fabrication	Storage and transport of ultra-pure etching acids and cleaning solvents used in wafer processing.	Prevents metallic contamination that could lead to semiconductor device failure.
Trace Element Analysis	Containing standard solutions and digested samples for ICP-MS and ICP-OES instrumentation.	Ensures extremely low background noise and high data reproducibility.
Catalyst Ink Storage	Holding slurries containing catalysts, isopropanol, and Nafion solutions for electrochemical testing.	Minimizes sample loss on bottle walls and prevents metal impurity interference.
Environmental Monitoring	Collection and storage of geological sediment samples and water for heavy metal quantification.	Prevents the adsorption of target ions (Cr, As, Pb) onto the container walls.
Pharmaceutical Research	Storage of high-purity solvents like acetonitrile and ammonium acetate for LC-MS/MS analysis.	Maintains baseline stability and ensures the purity of critical mobile phases.
Cryogenic Sampling	Long-term storage of biological or chemical samples in liquid nitrogen environments.	Retains structural integrity and sealing performance at -200°C.
Petrochemical Testing	Handling aggressive organic solvents and high-temperature reagents during fuel analysis.	Resists solvent penetration and thermal degradation in harsh conditions.

Specification Parameter	PL-CP408 Details
Product Identification	PL-CP408 Series
Material Composition	100% High-Purity Semiconductor Grade PFA (Perfluoroalkoxy)
Standard Capacities	500ml / 1000ml (Standard), Custom volumes available
Operating Temperature Range	-200°C to +260°C (-328°F to +500°F)
Chemical Compatibility	Universal (Acids, Bases, Oxidizers, Organic Solvents)
Surface Finish	Ultra-smooth, non-porous finish to minimize adsorption
Purity Standard	Electronics Grade / Trace Analysis Purity
Closure Type	High-seal screw cap with precision-molded threads
Customization Options	Available (CNC machining for bespoke dimensions, fittings, and caps)
Leaching Profile	Extremely low (sub-ppb levels for major metal ions)
Durability	Shatter-proof, impact-resistant, and chemically inert