Custom Pfa Pear Shaped Flask High Purity Corrosion Resistant Labware Custom Molded Fluoropolymer Flask Glass Replacement Solution

Item Number: PL-CP188

Introduction

Engineered for high-purity trace analysis, this custom PFA pear-shaped flask offers exceptional chemical resistance and low leaching. Replace fragile glass with durable precision-molded fluoropolymer solutions. Our custom fabrication ensures exact specifications for every critical process.

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Application	Description	Key Benefit
Trace Metal Analysis	Used for sample preparation and digestion where minimal background noise is required for ICP-MS or AAS.	Eliminates Si and B leaching for higher data accuracy.
Semiconductor Chemistry	Handling and storage of ultra-pure reagents and etching chemicals used in wafer fabrication.	Prevents metallic ion contamination in high-purity processes.
Organic Fluoride Synthesis	Reaction vessel for highly reactive or trace-impurity-sensitive organic fluorides.	Prevents molecular adsorption on walls, increasing yield.
Geochemical Digestion	Dissolution of geological samples using hydrofluoric acid at elevated temperatures.	Superior resistance to HF which would dissolve glass flasks.
Pharmaceutical R&D	Synthesis of active pharmaceutical ingredients (APIs) in aggressive solvent environments.	Ensures product purity and prevents vessel-sample interaction.
Environmental Monitoring	Concentration and evaporation of water or soil extracts containing corrosive pollutants.	Long-term durability and resistance to cross-contamination.
Electrochemical Research	Serving as a custom reservoir for corrosive electrolytes in advanced battery testing.	Maintains electrolyte integrity under various voltage and temperature conditions.

Feature	Specification Details (Model: PL-CP188)
Material Selection	High-Purity Perfluoroalkoxy (PFA)
Design Type	Pear-Shaped (Evaporation Flask Style)
Manufacturing Method	Custom Molding and Precision CNC Machining
Capacity Range	Fully customizable based on client requirements
Joint Sizes	Custom-fit (e.g., 14/20, 19/22, 24/40 or bespoke dimensions)
Wall Thickness	Tailored to application pressure and thermal needs
Thermal Resistance	-200°C to +260°C (Material limit)
Chemical Resistance	Universal resistance (except molten alkali metals and fluorine gas)
Surface Finish	Ultra-smooth, non-porous fluoropolymer surface
Custom Options	Custom neck lengths, side ports, and integrated sensor wells available