

High Purity Corrosion Resistant PTFE Raw Material Barrel 4L Screw Seal Low Background Feed Tank

Item Number: PL-CP124



Introduction

Premium 4L PTFE raw material barrels offer unmatched corrosion resistance and ultra-low background levels for trace analysis. These screw-sealed containers ensure leak-proof storage of high-purity chemicals in demanding laboratory and industrial environments. Fully customizable designs available.

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Application	Description	Key Benefit
Trace Metal Analysis	Storage of standard solutions and high-purity reagents for ICP-MS and ICP-OES.	Prevents metal ion leaching for accurate sub-ppb detection.
Semiconductor Processing	Transport and feeding of etching chemicals and high-purity photoresists.	Eliminates particle contamination and chemical degradation.
Pharmaceutical Synthesis	Handling of aggressive intermediates and highly reactive solvent mixtures.	Ensures batch purity and resists degradation from organic solvents.
Battery Research	Storage of corrosive electrolytes and lithium-based precursors.	Resists chemical attack from highly reactive battery components.
Petrochemical Testing	Sampling and analysis of crude oil fractions and acidic hydrocarbons.	High-temperature endurance and chemical resistance to organic compounds.
Food Grade Storage	Safe containment of flavorings and additives requiring extreme chemical purity.	FDA-compliant material properties with zero flavor transfer.
Fine Chemical Production	Feeding raw materials into pilot-scale microchannel reactors.	Precision flow support with high-integrity screw-sealed feed ports.

Parameter Group	Specification Detail	Model Identification: PL-CP124
Material Basis	Primary Construction Material	High-Purity Virgin PTFE / PFA (Customizable)
Capacity Metrics	Nominal Volume	4L (Standard) / Fully Customizable Sizes
Sealing Profile	Closure Mechanism	Heavy-Duty Screw Seal with Integrated Gasket Surface
Chemical Resistance	Compatible Media	All acids, alkalis, solvents, and oxidizers
Purity Standards	Background Levels	Ultra-low trace metal and organic precipitation
Fabrication Method	Manufacturing Process	End-to-end custom CNC machining (Non-molded)
Dimensions	Outer Diameter / Height	Customizable to client specifications
Wall Thickness	Structural Gauge	Heavy-wall design (Customizable for pressure/vacuum)
Temperature Range	Operating Limits	-200°C to +260°C (Material dependent)
Port Options	Feed/Vent Fittings	Customizable NPT, Flange, or Barb connections