

2L High Purity PTFE Reagent Bottle For Trace Analysis And Chemical Extraction With Customizable Specifications

Item Number: PL-CP0136



Introduction

Discover our high-purity 2L PTFE reagent bottles designed for low-background trace analysis and aggressive chemical extraction. Featuring exceptional thermal stability and chemical inertness, these customizable fluoropolymer vessels ensure zero contamination and leak-free performance in demanding industrial laboratory environments.

[Learn More](#)

Application	Description	Key Benefit
Trace Metal Analysis	Storage of 2% HNO ₃ diluents and rinsing solutions for ICP-MS and AAS testing.	Eliminates ion leaching and ensures low-background detection limits.
Semiconductor Processing	Transport and storage of ultra-pure grade hydrofluoric acid and photoresist developers.	Prevents chemical degradation and maintains reagent purity at the parts-per-trillion level.
Environmental Monitoring	Soil and water extraction processes involving aggressive solvents and heating cycles.	Resistant to leaching of phthalates or other organic contaminants common in plasticware.
Geochemical Digestion	High-temperature acid digestion of mineral samples for elemental characterization.	Maintains structural integrity up to 260°C under corrosive conditions.
Pharmaceutical Synthesis	Preparation and storage of reactive intermediates and active pharmaceutical ingredients (APIs).	Ensures zero reaction between the vessel and the synthesized compounds.
Biotechnology	Storage of specialized culture media containing growth regulators like BAP and GA ₃ .	Prevents loss of expensive micro-components via wall adsorption.
Cryogenic Storage	Long-term containment of biological samples or reactive chemicals in liquid nitrogen.	Retains flexibility and impact resistance at extremely low temperatures.
High-Purity Solvent Storage	Management of HPLC and GC-MS grade solvents requiring absolute purity.	Prevents the introduction of volatile organic compounds from the container material.

Feature	Specification for Item PL-CP0136	Options & Customization
Product Item Number	PL-CP0136	Available for custom variants
Nominal Capacity	2,000 mL (2 Liters)	Fully customizable from 5mL to 50L
Primary Material	Virgin PTFE (Polytetrafluoroethylene)	Optional PFA for visual transparency
Temperature Range	-200°C to +260°C	Constant stability across full range
Wall Construction	Heavy-wall, CNC-machined	Thickness can be specified per application
Closure Type	Precision-threaded screw cap	Wide-mouth or narrow-mouth options
Internal Finish	Ultra-smooth, crevice-free (Ra < 0.4µm)	Mirror-polish available for critical flows
Chemical Resistance	Universal (except molten alkali metals)	Superior to glass and HDPE/PP
Base Configuration	Flat-bottom (Stable)	Round-bottom or tapered available

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Feature	Specification for Item PL-CP0136	Options & Customization
Dimensions	Standard 2L profile	Height and diameter can be customized