

High Purity Custom Ptfе Large Volume 15L Flask Corrosion Resistant Low Trace Background Fluoropolymer Reaction Vessel

Item Number: PL-CP228



Introduction

Source premium custom large volume 15L PTFE flasks designed specifically for high-purity trace analysis and corrosive chemical processing. These low-background fluoropolymer vessels offer unmatched chemical inertness and durability for demanding modern industrial laboratory and complex chemical manufacturing applications today.

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Application	Description	Key Benefit
Semiconductor Grade Chemical Prep	Mixing and storing ultra-high purity etching solutions and photoresist developers.	Prevents metallic ion contamination critical for wafer yields.
Pharmaceutical Intermediate Synthesis	Large-scale reaction of corrosive precursors in sterile, non-reactive environments.	Eliminates leaching of plasticizers or catalysts into the product.
Geological Trace Analysis	Bulk digestion of soil or rock samples using concentrated hydrofluoric and nitric acids.	Resilience to HF and extremely low background for ppb-level detection.
Precious Metal Refining	Processing and recovery of gold and platinum group metals via aqua regia dissolution.	High-temperature acid resistance and ease of precious metal recovery.
Nuclear Industry Sampling	Handling and containment of radioactive or highly acidic liquid waste streams.	Superior radiation resistance and leak-proof structural integrity.
Fine Chemical Production	Small-batch manufacturing of high-value specialty chemicals and reagents.	Consistent purity and flexibility for custom reaction setups.
Environmental Monitoring	Preparation of large-volume water samples for pesticide and heavy metal screening.	Minimal surface adsorption ensures accurate sample representation.

Specification Category	Parameter Details (Model PL-CP228)
Base Material	High-Purity Virgin PTFE (Polytetrafluoroethylene)
Optional Materials	PFA (Perfluoroalkoxy) for enhanced transparency or chemical purity
Nominal Volume	15,000 mL (15 Liters)
Custom Volume Range	Scalable from 5L to 50L based on custom engineering requirements
Operational Temperature	-200°C to +260°C
Chemical Compatibility	Universal (Except molten alkali metals and gaseous fluorine)
Fabrication Method	100% Solid-Billet CNC Machining
Wall Thickness	Customizable (Standard heavy-wall design for industrial durability)
Neck Configuration	Single or Multiple Neck (Customizable taper sizes or GL threads)
Closure Type	Matching PTFE screw caps or ground-joint stoppers available

Application	Description	Key Benefit
Specification Category	Parameter Details (Model PL-CP228)	
Surface Finish	High-precision machined finish (Mechanical polishing available)	
Base Design	Flat, Round, or Concave (Customizable for heating mantle compatibility)	