

High Purity Ptfе Wide Mouth Extraction Bottle Large Capacity Reaction Vessel For Rotary Agitators

Item Number: PL-CP144



Introduction

This 2L high-purity PTFE wide-mouth bottle is engineered for rigorous extraction and reaction processes, offering unparalleled chemical resistance and seamless compatibility with rotary agitators, ensuring reliable performance in demanding laboratory and industrial environments.

[Learn More](#)

Application	Description	Key Benefit
TCLP Extraction	Used in the Toxicity Characteristic Leaching Procedure to simulate waste leaching in landfills.	Complete chemical resistance to acetic acid and aggressive extraction fluids.
Trace Metal Analysis	Preparation and storage of samples for ICP-MS and ICP-OES analysis.	Zero-background contamination due to high-purity virgin fluoropolymer material.
Acid Digestion	Dissolution of mineral and geological samples using concentrated HF or HNO ₃ .	Exceptional safety and durability when handling highly corrosive reagents at heat.
Rotary Agitation Tests	Mechanical shaking of solid/liquid mixtures for environmental hazardous waste testing.	Robust mechanical build quality prevents leaks or breakage during 24-hour cycles.
Pharmaceutical Synthesis	Reaction vessel for synthesizing sensitive organic compounds and intermediates.	Non-reactive surface ensures no catalytic interference with the reaction pathway.
Hazardous Material Storage	Secure containment of aggressive solvents and volatile chemicals in high-traffic labs.	Heavy-duty screw cap prevents vapor escape and ensures transport safety.

Property	Value / Specification (PL-CP144)
Material	High-Purity Virgin Polytetrafluoroethylene (PTFE/F4)
Standard Capacity	2000 mL (2L)
Dimensional Format	Wide-Mouth / Broad Shoulder
Closure Type	PTFE Internal Thread Screw Cap
Specific Gravity	2.10 - 2.20 g/cc
Melting Point	327°C (621°F)
Heat Deflection Temperature	120°C (248°F) at 66 psi
Max Operating Temp	260°C (500°F)
Shore Hardness	55D
Coefficient of Friction	0.110 (Static/Dynamic)
Tensile Strength	2990 - 4970 psi
Flexural Strength	2490 psi
Water Absorption	< 0.01% (after 24 hours immersion)

Application	Description	Key Benefit
Property	Value / Specification (PL-CP144)	
Dielectric Constant	2.1	
Internal Finish	Crevice-free, high-precision CNC polished	
Compatibility	Optimized for FZ-4 and similar rotary shaker systems	
Customization	Available for all physical dimensions and volumes	