Custom Thickened Ptfe Beaker High Temperature Hot Plate Heating Laboratory Fluoropolymer Vessel Chemical Resistant Digestion Beaker

Item Number: PL-CP234

Introduction

This precision-engineered custom PTFE beaker is designed for hot plate heating and extreme chemical resistance. These thickened fluoropolymer vessels offer superior thermal stability and deformation resistance, ensuring reliable performance in demanding laboratory environments. Contact us for bespoke high-purity solutions.

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Application	Description	Key Benefit
Acid Digestion	Preparation of samples for ICP-MS and AAS analysis using concentrated nitric or hydrofluoric acids.	Zero leaching of trace elements ensures analytical accuracy.
Semiconductor Cleaning	Etching and cleaning of silicon wafers and delicate electronic components with aggressive chemical baths.	Maintains high-purity environments without contaminating sensitive materials.
Petrochemical Testing	Heating and mixing of heavy crude oils and volatile organic compounds at elevated temperatures.	High temperature resistance and non-flammability enhance lab safety.
Pharmaceutical Synthesis	Reaction vessel for the synthesis of active pharmaceutical ingredients (APIs) involving corrosive catalysts.	Inert surface prevents unintended catalytic reactions or contamination.
Environmental Monitoring	Large-scale processing of soil and water samples for the detection of heavy metals and pollutants.	Robust construction supports high-volume throughput and reuse.
Electrochemical Research	Serving as a non-conductive, chemically resistant cell container for battery and electrode testing.	Electrical insulation and chemical stability under varied potentials.

Feature	Specification Details (Model: PL-CP234)
Material	Premium Virgin Polytetrafluoroethylene (PTFE)
Primary Capacity	400ml (Fully Customizable)
Wall Configuration	Heavy-Duty Thickened Wall (Customizable)
Base Geometry	Precision-Machined Flat Bottom for Hot Plate Contact
Continuous Operating Temp	Up to 200°C
Maximum Temperature Limit	260°C (Short-term exposure)
Chemical Compatibility	Universal (Except molten alkali metals and fluorine gas)
Flammability Rating	UL94 V0
Manufacturing Process	Precision CNC Machining / Lathe Turning
Customization Range	Volume, Height, Diameter, Wall Thickness, and Spout Design