

Custom Thickened PTFE Laboratory Beaker For High Temperature Hot Plate Applications

Item Number: PL-CP235



Introduction

Engineered for extreme chemical resistance, this thickened PTFE beaker provides exceptional thermal stability up to 200°C. Perfect for demanding laboratory heating tasks, it features a heavy-duty design to resist deformation under high-stress industrial and chemical processing conditions.

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Application	Description	Key Benefit
Trace Metal Digestion	Preparing environmental samples using concentrated nitric or hydrofluoric acids at high heat.	Zero metal ion leaching ensures sample purity for ICP-MS analysis.
Semiconductor Etching	Handling high-purity etching solutions used in wafer cleaning and processing.	Exceptional resistance to aggressive acidic mixtures used in cleanrooms.
Battery Electrolyte Research	Formulating and testing lithium-ion battery electrolytes that are sensitive to moisture and impurities.	Chemical inertness prevents side reactions during sensitive formulation processes.
Pharmaceutical Synthesis	Conducting small-batch reactions involving highly corrosive organic catalysts or precursors.	Non-stick surface allows for complete recovery of high-value active ingredients.
Noble Metal Refining	Dissolving precious metals in aqua regia for assaying and purification.	Durable thickened walls withstand the high heat and extreme acidity of the dissolution process.
Molten Salt Studies	Researching energy storage materials at sustained temperatures near 200°C.	Superior thermal endurance prevents structural failure during long-term heating cycles.

Specification	Detail for PL-CP235
Base Model Number	PL-CP235
Nominal Capacity	300ml (Standard) / Fully Customizable
Material Composition	100% High-Purity PTFE (Polytetrafluoroethylene)
Wall Thickness Strategy	Thickened/Heavy-Duty Machined Construction
Continuous Working Temperature	Up to 200°C (392°F)
Maximum Intermittent Temperature	260°C (500°F)
Heating Surface Compatibility	Direct contact with ceramic/metal hot plates
Chemical Compatibility	Universal (Except molten alkali metals and gaseous fluorine)
Flammability Rating	UL94 V-0
Coefficient of Friction	Extremely Low (0.05 to 0.10)
Customization Options	Height, Diameter, Wall Thickness, Handles, Graduations, Spouts