

Custom High Purity Ptfе Multi Neck Flask 200MI Chemical Synthesis Reaction Vessel

Item Number: PL-CP256



Introduction

Procure custom high-performance PTFE multi-neck flasks for critical chemical synthesis. These 200ml reaction vessels offer unmatched chemical resistance and thermal stability for demanding industrial laboratory applications. Contact us for bespoke CNC-machined laboratory solutions tailored specifically to your needs today.

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Application	Description	Key Benefit
Acid Digestion	High-temperature decomposition of samples using concentrated nitric or hydrofluoric acid for trace element detection.	Complete resistance to acid attack prevents vessel failure and sample contamination.
Pharmaceutical Synthesis	Multi-step organic synthesis requiring precise control over temperature and reagent addition in an inert environment.	Exceptional purity levels and easy cleaning between different synthetic steps.
Battery Electrolyte Testing	Evaluation of corrosive lithium-ion battery electrolytes and additives under controlled laboratory conditions.	Maintains integrity when exposed to highly reactive fluorinated compounds and salts.
Petrochemical Analysis	Testing of crude oil fractions and catalysts involving sulfur-rich compounds and high thermal gradients.	Thermal stability up to 260°C allows for high-boiling point reagent processing.
Semiconductor Chemistry	Preparation and storage of ultra-pure etching solutions and precursor chemicals for microchip manufacturing.	Zero leaching of metallic ions ensures the highest possible material standards.
Polymerization Research	Synthesis of specialty polymers where the non-stick nature of the vessel prevents product adhesion to the walls.	High product recovery rates and simplified vessel maintenance after reaction completion.

Parameter	Specification
Item Number	PL-CP256
Standard Volume	200ml (Custom volumes available)
Neck Configuration	Customizable (Single, Double, Triple, or Quad-neck)
Neck Type	Standard Taper (NS) or Threaded (GL) Options
Material	Virgin Polytetrafluoroethylene (PTFE)
Specific Gravity	2.10 - 2.20 g/cc
Melting Point	327°C (621°F)
Max Operating Temperature	260°C (Continuous)
Tensile Strength	2990 - 4970 psi
Hardness (Shore D)	55D
Water Absorption	< 0.01% (24 hours)
Dielectric Constant	2.1

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Parameter	Specification	
Coefficient of Friction	0.110	
Fabrication Method	End-to-end CNC Machined	
Surface Finish	Crevice-free, ultra-smooth internal bore	