

Custom Multi Neck Ptfе Round Bottom Flask For High Purity Chemical Laboratory Experiments And Industrial Synthesis

Item Number: PL-CP259



Introduction

Engineered for extreme chemical resistance, this custom multi-neck PTFE flask supports complex laboratory synthesis and high-purity chemical processing. Featuring a robust fluoropolymer build, it ensures leak-free performance and compatibility with stirring systems and specialized filtration funnels for industrial labs.

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| Application | Description | Key Benefit |
|----------------------------|--|--|
| Trace Metal Analysis | Preparation and digestion of samples using concentrated acids for ICP-MS analysis. | Zero background contamination from vessel leaching. |
| Semiconductor Etching | Handling and mixing of high-purity etching solutions used in wafer fabrication. | Resistance to aggressive HF and BOE solutions. |
| Pharmaceutical Synthesis | Multi-neck reaction setup for the production of active pharmaceutical ingredients (APIs). | Multi-functional setup for stirring and addition. |
| Battery Research | Testing and mixing of corrosive electrolyte components for lithium-ion technology. | Long-term durability in highly reactive environments. |
| Petrochemical Testing | Analysis of high-sulfur oils and corrosive petrochemical derivatives at elevated temperatures. | High thermal stability and chemical resistance. |
| Specialized Polymerization | Conducting synthesis reactions that require precise temperature monitoring and stirring. | Compatibility with custom-machined stirring paddles. |
| Cryogenic Research | Storage and reaction of materials at extremely low temperatures using liquid nitrogen. | Retains flexibility and strength without becoming brittle. |

| Feature | Specification (Model PL-CP259) |
|-------------------------|---|
| Primary Material | High-Purity Polytetrafluoroethylene (PTFE) |
| Standard Volume | 100ml (Fully Customizable from 10ml to 50L) |
| Neck Configuration | Multi-neck (Dual, Triple, Quad, or Bespoke Layouts) |
| Joint/Interface Types | Machined Tapered (e.g., 24/40, 29/32) or Threaded (GL-series) |
| Wall Thickness | Standard Heavy-Wall (Customizable for Pressure Applications) |
| Temperature Range | -200°C to +260°C (-328°F to +500°F) |
| Surface Roughness | Ultra-smooth CNC machined finish; crevice-free |
| Lid/Cap Options | Custom PTFE caps with integrated port seals available |
| Accessory Compatibility | Stirring Paddles, Dropping Funnels, Thermowells, and Condensers |