

High Purity Ptfе Rectangular Acid Tank Corrosion Resistant Integrated Square Water Bath

Item Number: PL-CP11



Introduction

Engineered from premium high-purity PTFE, this corrosion-resistant integrated rectangular tank offers exceptional chemical inertness for acid pickling and trace analysis. Custom-fabricated to your dimensions, it ensures leak-proof performance and thermal stability in the most demanding industrial laboratory environments.

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Application	Description	Key Benefit
Semiconductor Etching	Housing for hydrofluoric acid and other etchants used in wafer processing and cleaning.	Zero contamination and resistance to HF.
Trace Metal Analysis	Preparation and cleaning of labware in concentrated nitric or hydrochloric acid baths.	Prevents leaching of metallic impurities.
Pharmaceutical Synthesis	Storage and mixing of highly reactive organic solvents and aggressive chemical precursors.	Inert reaction environment for drug purity.
Electrochemistry	Serving as a custom cell housing or electrolyte reservoir for battery testing and plating.	Electrical insulation and chemical stability.
Acid Pickling	Industrial-scale surface treatment of metal components using hot acid baths.	Long-term durability in highly corrosive conditions.
Environmental Testing	Sample digestion and storage for soil and water analysis involving strong reagents.	Accurate results without plasticizer interference.
Aerospace Materials	Chemical treatment and coating of specialized aerospace alloys in controlled baths.	Reliable performance under varying heat loads.
Food & Flavor Industry	Safe handling of concentrated essences and acidic food-grade additives during testing.	FDA-compliant material safety and non-stick cleaning.

Specification Category	Parameter Details	Item Number: PL-CP11
Material Composition	100% High-Purity Virgin PTFE / PFA Options	Custom Material Grade Available
Geometric Configuration	Rectangular, Square, Circular, or Irregular	Fully Customizable to Specification
Dimensional Range	Custom Height, Width, Depth, and Wall Thickness	Custom Built to User Requirement
Temperature Range	-200°C to +250°C (-328°F to +482°F)	High Thermal Stability
Chemical Resistance	Acids, Bases, Solvents, Oxidizing Agents	Universal Compatibility
Surface Finish	Smooth, Non-Porous CNC Machined Finish	Low Friction (<0.10 Coefficient)
Moisture Absorption	<0.01% (ASTM D570)	Virtually Non-Absorbent
Lid Options	Loose Fit, Threaded, or Sealed with Gaskets	Available Upon Request
Mounting & Fittings	Integrated Handles, Drain Ports, or Sensor Bosses	Bespoke CNC Fabrication
Fabrication Method	Integrated One-Piece Machining or Molding	Seamless Construction