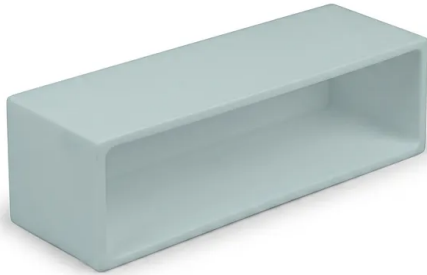


# Custom Ptfе Reaction Box Opaque White Square Electrochemical Cell Tank

Item Number: PL-CP279



## Introduction

Precision-engineered custom PTFE reaction boxes and square tanks provide unmatched chemical resistance and thermal stability for demanding lab environments. Our opaque white fluoropolymer vessels are fully customizable to meet specific industrial and research requirements for high-purity trace analysis and synthesis.

[Learn More](#)

Application	Description	Key Benefit
Electrochemical Research	Custom-sized cells for testing battery materials and ionic liquids with precise electrode positioning.	Reduced ohmic drop and high reproducibility.
Trace Metal Analysis	Digestion and storage of samples involving concentrated acids for ICP-MS or AAS preparation.	High purity with minimal leachable contamination.
Semiconductor Cleaning	Precision tanks for etching and cleaning silicon wafers or sensitive electronic components.	Resistance to aggressive etching chemistries.
Pharmaceutical Synthesis	Reaction vessels for small-batch pharmaceutical intermediates requiring high sterility.	Chemical inertness and ease of sterilization.
In-Situ Spectroscopy	Reaction boxes with integrated windows for real-time monitoring of valence state evolution.	Accurate real-time data acquisition in corrosive environments.
High-Purity Storage	Long-term containment of volatile reagents and high-purity solvents in industrial labs.	Leak-free performance and UV protection.
Acid Digestion	High-temperature dissolution of mineral or organic samples using strong mineral acids.	Durability under extreme chemical and thermal stress.

Property	Value / Detail	Metric Unit
<b>Model Identifier</b>	<b>PL-CP279</b>	<b>N/A</b>
<b>Material Composition</b>	High-Purity Polytetrafluoroethylene (PTFE)	100% Virgin Grade
<b>Dimensions</b>	<b>Customized per client specification</b>	mm / inch
<b>Specific Gravity</b>	2.10 - 2.20	g/cc
<b>Melting Point</b>	327 (621)	°C (°F)
<b>Heat Deflection Temp (66 psi)</b>	120 (248)	°C (°F)
<b>Hardness (Shore D)</b>	55D	N/A
<b>Tensile Strength</b>	2990 - 4970	psi
<b>Flexural Strength</b>	2490	psi
<b>Coefficient of Friction</b>	0.110	N/A
<b>Water Absorption (24h)</b>	0.01	%
<b>Dielectric Constant</b>	2.1	@ 1MHz

Application	Description	Key Benefit
Property	Value / Detail	Metric Unit
<b>Optical Properties</b>	Opaque White	N/A
<b>Surface Finish</b>	Smooth CNC Machined (Crevice-free)	N/A