

# Custom Ptfе Petri Dishes Corrosion Resistant High Purity Low Background Labware

Item Number: PL-CP92



## Introduction

High-purity custom PTFE petri dishes designed for trace analysis and membrane casting. These vessels offer exceptional chemical resistance, zero leaching, and a non-stick surface, ensuring the highest integrity for sensitive laboratory processes and demanding industrial applications.

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Application	Description	Key Benefit
Membrane Casting	Used as a substrate for forming hybrid membranes from casting solutions containing solvents like acetic acid.	Damage-free membrane peeling due to non-stick surface properties.
Trace Metal Analysis	Preparation and digestion of samples for ultra-trace element detection in high-purity labs.	Prevents sample contamination from leached metal ions and impurities.
Semiconductor Etching	Handling of aggressive silicon wafers and etching solutions like HF.	Exceptional resistance to corrosive etching chemicals used in wafer processing.
Pharmaceutical Synthesis	Reaction vessel for complex drug discovery processes involving organic solvents.	No chemical interaction with reactive pharmaceutical ingredients.
Environmental Monitoring	Evaporation and concentration of soil or water extracts for pollutant analysis.	Low adsorption of analytes onto the vessel walls ensures accurate quantification.
Biological Sample Prep	Processing of delicate biological materials that require non-reactive containment.	Biocompatible and protein-resistant surface minimizes sample interaction.
Cryogenic Research	Storage and handling of materials at liquid nitrogen temperatures.	Remains flexible and crack-resistant at extremely low temperatures.

Parameter	Specification for PL-CP92
Base Material	100% Virgin Polytetrafluoroethylene (PTFE)
Item Number Reference	PL-CP92
Customization Options	Diameter, Height, Wall Thickness, and Specialized Geometries
Specific Gravity	2.10 - 2.20 g/cc
Melting Point	621 °F / 327 °C
Max. Continuous Service Temp.	500 °F / 260 °C
Heat Deflection Temp (66 psi)	248 °F / 120 °C
Shore Hardness	55D
Coefficient of Friction	0.110 (Dynamic)
Tensile Strength	2,990 - 4,970 psi
Flexural Strength	2,490 psi

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<b>Water Absorption (24 hr)</b>	< 0.01%	
<b>Dielectric Constant</b>	2.1	
<b>Surface Texture</b>	CNC Machined / Ultra-Smooth Finish	