

# Custom Ptfе Petri Dish 90Mm Diameter Corrosion Resistant Low Background High Purity Labware

Item Number: PL-CP94



## Introduction

Premium 90mm custom PTFE petri dishes offer ultimate chemical resistance and low-background performance. Ideal for trace analysis and membrane casting, these non-stick vessels ensure zero leaching and exceptional thermal stability for demanding industrial laboratory environments.

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Application	Description	Key Benefit
Trace Element Analysis	Sample preparation for heavy metal detection and elemental fingerprinting in environmental or food safety labs.	Prevents background noise and ensures analytical accuracy.
Membrane Casting	Used as a substrate for casting hybrid or polymer membranes during the solvent evaporation process.	Clean peeling and preservation of membrane surface structure.
Semiconductor Cleaning	Handling of ultra-pure silicon wafers and components during acidic etching and cleaning cycles.	High purity levels prevent metallic ion contamination on wafers.
Pharmaceutical Synthesis	Reaction vessel for the synthesis of active pharmaceutical ingredients (APIs) involving aggressive catalysts.	Eliminates risk of impurities leaching into the final drug product.
Hydrofluoric Acid Digestion	Dissolution of geological or ceramic samples using HF at elevated temperatures.	Superior resistance to HF which would etch or destroy glass vessels.
High-Purity Reagent Storage	Temporary containment of ultra-pure acids and bases during sensitive titration or dosing procedures.	Maintains reagent concentration and purity over extended periods.
Cryogenic Material Testing	Testing of materials and biological samples at extremely low temperatures using liquid nitrogen.	Retains flexibility and structural integrity at cryogenic scales.

Specification Category	Parameter	Value / Range (Model PL-CP94)
<b>Dimensional Data</b>	Nominal Diameter	90mm (Customizable)
	Wall Height	Customized per requirement
	Bottom Thickness	Customized per requirement
	Fabrication Method	High-precision CNC Machined
<b>Material Properties</b>	Material Type	Polytetrafluoroethylene (PTFE)
	Specific Gravity	2.10 - 2.20 g/cc
	Melting Point	327°C (621°F)
	Heat Deflection Temp	120°C (248°F)
	Hardness	55D (Shore Scale)
	Tensile Strength	2990 - 4970 psi
	Flexural Strength	2490 psi

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<b>Performance Metrics</b>	Coefficient of Friction	0.110
	Water Absorption	< 0.01% (24 hours)
	Dielectric Constant	2.1
	Chemical Resistance	Excellent (Universal)
	Surface Finish	Super smooth, crevice-free