High Purity Pfa Sampling Ladle Custom Molded Ptfe Water Scoop Chemical Resistant Laboratory Dipper

Item Number: PL-CP187

Introduction

Optimize trace analysis with our custom PFA sampling ladles. Engineered for exceptional chemical resistance and ultra-low metal ion leaching, these bespoke tools provide pure sample integrity for semiconductor, pharmaceutical, and high-sensitivity industrial laboratory applications.

Learn More

Application	Description	Key Benefit
Semiconductor Wafer Cleaning	Transferring high-purity etching chemicals and cleaning solutions within cleanroom environments.	Prevents metal ion contamination critical for sub-micron manufacturing yield.
Environmental Trace Analysis	Sampling groundwater and industrial effluent for heavy metal detection and low-level pollutant monitoring.	Ensures sample integrity by eliminating background noise from container leaching.
Pharmaceutical API Synthesis	Handling aggressive reagents and catalysts during the production of active pharmaceutical ingredients.	FDA-compliant material purity and resistance to cross-contamination between batches.
Nuclear Chemistry	Sampling radioactive liquids and corrosive coolants in controlled laboratory settings.	Exceptional radiation resistance and chemical stability under extreme conditions.
Forensic Science	Collection and transfer of chemical evidence where the highest degree of purity is required for legal validation.	Non-reactive surface prevents the alteration of sensitive chemical markers.
Petrochemical Testing	Dipping and sampling refined fuels, additives, and refinery wastewater for quality control.	Resistance to aromatic hydrocarbons and complex organic solvent mixtures.
Battery Research	Handling electrolytes and aggressive chemical precursors in lithium-ion and next-generation battery testing.	Stability against the reactive salts and solvents used in high-performance battery chemistry.

Specification Category	Parameter Details for PL-CP187
Model Identification	PL-CP187 Series
Material Options	High-Purity PFA (Perfluoroalkoxy) or PTFE (Polytetrafluoroethylene)
Volume Capacity	Fully Customizable (Commonly 50ml, 100ml, 250ml, 500ml, 1000ml+)
Handle Length	Customizable to suit specific tank or drum depths
Handle Diameter	Adjustable for ergonomic grip or mounting requirements
Operating Temperature	-200°C to +260°C
Chemical Resistance	Universal (Except molten alkali metals and fluorine at high pressure)
Surface Finish	High-precision CNC machined or injection-molded smooth finish
Trace Metal Content	<1 ppb for critical elements (Material Grade Dependent)
Fabrication Method	End-to-end custom CNC fabrication or custom mold injection