High Temperature Resistant Ptfe Solid Sampler Corrosion Resistant Non Leaching Reusable Biopharmaceutical White Powder Sampling Device

Item Number: PL-CP332

Introduction

High-performance PTFE solid sampler engineered for biopharmaceutical trace analysis. This corrosion-resistant, reusable, and non-leaching sampling tool ensures sample integrity across extreme temperatures. Customizable designs available to meet specific industrial laboratory requirements for sterile, contamination-free powder and solid collection.

Learn More

Application	Description	Key Benefit
Biopharmaceutical API Sampling	Collection of active pharmaceutical ingredients from sterile bulk containers for quality testing.	Prevents leaching of impurities into high-value medical compounds.
Petrochemical Powder Analysis	Extracting granular catalysts or chemical powders from high-temperature reaction streams.	Maintains structural integrity under extreme heat and chemical stress.
Trace Metal Detection	Sampling of solid reagents for use in environmental or semiconductor laboratory analysis.	Guaranteed zero-metal contamination for accurate ppb-level detection.
Fine Chemical Production	Routine monitoring of solid intermediates during multi-stage synthesis processes.	Universal resistance to aggressive solvents and corrosive solids.
Food and Beverage Testing	Hygienic sampling of dry ingredients and additives in a controlled production environment.	FDA-compliant material ensures no flavor transfer or toxic leaching.
Cryogenic Material Handling	Retrieving solid samples from liquid nitrogen or ultra-low temperature storage units.	Remains ductile and crack-resistant at sub-zero temperatures.
Hazardous Waste Characterization	Safe collection of unknown solid waste samples for environmental regulatory compliance.	Protects the sample and the operator from reactive chemical degradation.
Battery Material Research	Handling of sensitive electrolyte salts and lithium-based powder compounds in dry rooms.	High purity prevents contamination of sensitive electrochemical components.

Specification Parameter	Details for PL-CP332 Series
Model Number	PL-CP332
Primary Material	High-Purity Virgin Polytetrafluoroethylene (PTFE)
Color	Natural Opaque White
Chemical Compatibility	pH 0-14 (Universal resistance except for molten alkali metals)
Temperature Range	-200°C to +260°C (-328°F to +500°F)
Surface Porosity	Non-porous, smooth-bore CNC finish
Sterilization Methods	Autoclave, ETO, Gamma Radiation, or Chemical Wipe-down
Design Format	Customizable (Solid rod, scoop, or hollow-core designs available)

Application	Description	Key Benefit
Specification Parameter	**Details for PL-CP332 Series**	
Shaft Length	Customized Product - Manufactured to user-defined length	
Sampling Volume	Customized Product - Tailored to specific volume requirements	
Outer Diameter	Customized Product - Engineered to fit specific port sizes	
Fabrication Method	End-to-end custom CNC machining for non-standard geometries	