High Purity Ptfe Material Shovel Non Stick Chemically Inert Pharmaceutical Scoop For Trace Analysis

Item Number: PL-CP139

Introduction

Engineered for zero-contamination, this high-purity PTFE shovel offers universal chemical resistance and a non-stick surface. Ideal for pharmaceutical processing and trace analysis, it provides superior thermal stability and customizable dimensions for demanding industrial laboratory environments.

Learn More

Application	Description	Key Benefit
Pharmaceutical API Handling	Transferring active pharmaceutical ingredients during the synthesis and formulation stages.	Prevents batch-to-batch contamination and ensures chemical purity.
Trace Metal Analysis	Preparation of samples for ICP-OES and ICP-MS testing in environmental or clinical labs.	Zero metal leaching ensures high analytical accuracy and low detection limits.
Semiconductor Processing	Handling of high-purity quartz sands or chemical precursors in cleanroom environments.	Low outgassing and high chemical resistance protect delicate silicon wafers.
Cryogenic Material Transfer	Moving samples stored in liquid nitrogen or dry ice environments.	Retains flexibility and impact resistance at sub-zero temperatures.
Corrosive Chemical Sampling	Extracting samples from tanks containing aggressive mineral acids or organic solvents.	Eliminates the risk of tool corrosion and subsequent sample degradation.
Food and Flavor Production	Handling of concentrated essential oils, acids, and food-grade powders.	FDA-compliant material properties ensure non-toxicity and easy sanitization.
Electrochemical Research	Loading of materials into high-performance battery test fixtures or electrochemical cells.	Prevents unwanted electrochemical interference from metallic tools.

Property Group	Parameter	Value/Metric
Model Identifier	Item Number	**PL-CP139**
Physical Properties	Specific Gravity	2.10 - 2.20 g/cc
	Water Absorption (24 hr)	0.01%
Thermal Properties	Melting Point	327°C (621°F)
	Heat Deflection Temp (HDT)	120°C (248°F)
	Operating Temperature Range	-200°C to +260°C
Mechanical Properties	Hardness (Shore D)	55D
	Tensile Strength	2,990 - 4,970 psi
	Flexural Strength	2,490 psi
	Coefficient of Friction	0.110
Electrical Properties	Dielectric Constant	2.1
Fabrication	Manufacturing Process	Precision CNC Machined

Application	Description	Key Benefit
Property Group	**Parameter**	**Value/Metric**
	Customization	Fully Customizable Dimensions