

Large Mouth PTFE Sample Storage Drum Custom Chemical Resistant Fluoropolymer Container Acid Base Proof Labware

Item Number: PL-CP385



Introduction

High-purity large mouth PTFE sample storage drums offer superior chemical resistance for aggressive acids and bases. Customizable 50L containers ensure leak-free performance and contamination-free storage for demanding industrial, pharmaceutical, and high-purity laboratory sample management and processing.

[Learn More](#)

Application	Description	Key Benefit
Semiconductor Manufacturing	Storage and transport of ultra-high purity (UHP) etching acids and cleaning solvents.	Prevents metallic ion contamination and maintains sub-ppb purity levels.
Pharmaceutical Processing	Containment of active pharmaceutical ingredients (APIs) and reactive intermediates during synthesis.	Ensures zero leachable interference and survives sterilization protocols.
Trace Analysis Research	Sample collection and storage for environmental monitoring involving aggressive digestion reagents.	Minimizes sample loss through adsorption and eliminates background contamination.
Petrochemical Testing	Management of corrosive crude oil additives and highly reactive catalyst components.	High thermal stability and resistance to hydrocarbon-based solvents.
Specialty Chemical Production	Bulk storage of concentrated reagents that degrade standard polymer or glass containers.	Long-term durability and resistance to stress-cracking in harsh environments.
Nuclear Industry	Handling of radioactive liquid waste and corrosive isotope separation chemicals.	Radiation stability and exceptional containment reliability.
Aerospace Materials	Storage of high-performance lubricants and hydraulic fluids that require high purity.	Maintenance of fluid integrity and resistance to varying pressure/temperature cycles.

Specification Category	Parameter Details for PL-CP385	Customization Options
Model Identifier	PL-CP385	Base platform for all bespoke variations
Material Construction	100% Virgin High-Purity PTFE	Custom filled PTFE (e.g., carbon, glass) available
Volume Capacity	Customizable (Standard base up to 50L)	Range from 1L to 100L+ based on request
Temperature Range	-200°C to +260°C	Fixed material property
Chemical Resistance	Universal (pH 0-14)	Resistant to all known acids, bases, and solvents
Neck Style	Large Mouth / Wide Opening	Diameter can be specified for pump insertion
Wall Thickness	Heavy-wall industrial grade	Customizable based on pressure or weight needs
Surface Finish	Crevice-free, high-polish interior	Custom Ra values achievable via CNC
Closure Mechanism	PTFE Threaded Screw Cap	Optional secondary seals or venting caps
Manufacturing Method	Full CNC Machining / Isostatic Molding	Tailored to complex geometric requirements
Certification	Material purity certification provided	Custom traceability and documentation available