

# Custom High Purity Ptfе Digestion Tubes And Centrifuge Tubes For Trace Metal Analysis

Item Number: PL-CP218



## Introduction

Premium high purity PTFE digestion and centrifuge tubes engineered for trace analysis and demanding chemical processing. Our custom fabricated fluoropolymer vessels ensure zero contamination and exceptional thermal stability for precise laboratory results across all industrial sectors. Request custom quotes.

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Application	Description	Key Benefit
Environmental Soil Analysis	Digestion of soil and sediment samples using concentrated nitric acid to extract heavy metals for ICP-MS testing.	Minimal trace metal leaching ensures accurate detection of low-level pollutants.
Pharmaceutical Impurity Testing	Preparation of active pharmaceutical ingredients (APIs) for USP <232>/<233> elemental impurity analysis.	High purity material prevents the introduction of exogenous metal contaminants.
Geochemical Ore Digestion	Dissolution of complex mineral and ore samples using hydrofluoric acid combinations at elevated temperatures.	Complete resistance to HF ensures the equipment will not dissolve or contaminate the sample.
Biological Matrix Mineralization	Breakdown of tissue, blood, or plant material under high-pressure microwave conditions for nutritional analysis.	Microwave transparency allows for rapid, uniform heating and faster digestion times.
Petrochemical Catalyst Recovery	Digestion of spent catalysts and oil samples to determine precious metal content and wear metals.	Exceptional thermal stability allows for high-boiling point acid digestions without deformation.
Forensic Toxicology	Centrifugation and separation of biological fluids for the detection of trace toxins and narcotics.	High-speed durability and chemical resistance ensure safe handling of sensitive samples.
High-Purity Chemical Production	Storage and processing of ultra-pure reagents and solvents used in semiconductor manufacturing.	Non-stick surfaces and chemical inertness maintain the high-purity grade of the contents.

Parameter	Specifications for PL-CP218 Series
Base Material	100% High-Purity Virgin PTFE (Polytetrafluoroethylene)
Manufacturing Method	High-precision CNC Machining / Custom Fabrication
Model Identifier	PL-CP218 (Includes standard and bespoke variants)
Standard Capacity	100ml (Custom volumes available upon request)
Operating Temperature Range	-200°C to +260°C
Pressure Resistance	Application dependent; supports up to 200 bar in supported microwave liners
Internal Geometry	Fully Customizable (Conical, Flat, Round, or Custom Taper)
Closure Type	Screw Cap, Push-fit, or Flanged (Customizable per application)
Wall Thickness	Customizable to meet specific pressure or thermal requirements
Surface Finish	High-grade smooth finish to prevent sample adhesion
Trace Metal Background	Sub-ppb levels (Application and cleaning protocol dependent)

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**Microwave  
Compatibility**

Fully transparent to microwave radiation