

Virgin PTFE Precision Syringe For Chemical Dispensing And Syringe Pump Integration With FEP Tubing Compatibility

Item Number: PL-CP102



Introduction

Discover this premium 30ml virgin PTFE syringe designed for extreme chemical resistance and high-purity fluid handling. Perfect for syringe pump integration and compatible with FEP extension tubing, it ensures reliable performance in demanding laboratory and industrial applications for precision dispensing.

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| Application | Description | Key Benefit |
|--------------------------|---|---------------------------------|
| Trace Metal Analysis | Handling ultra-pure acids and samples for ICP-MS or AAS without metal ion contamination. | Sub-ppb purity levels |
| Semiconductor Etching | Controlled dispensing of hydrofluoric acid and etching buffers in microelectronics fabrication. | Absolute corrosion resistance |
| Pharmaceutical Dosing | Precise delivery of active pharmaceutical ingredients (APIs) in drug formulation and synthesis. | Zero leachable content |
| Battery Research | Transferring corrosive electrolytes and lithium-based compounds in energy storage testing. | High electrochemical stability |
| Environmental Monitoring | Sampling and preparation of volatile organic compounds (VOCs) and hazardous pollutants. | Chemical structural integrity |
| Automated Flow Chemistry | Continuous reagent supply within microchannel reactors and automated synthesis platforms. | Pulse-free fluid delivery |
| Petrochemical Testing | Analysis of high-temperature hydrocarbons and aggressive catalysts in refining research. | Thermal and chemical durability |

| Feature | Specification Details (PL-CP102 Series) |
|--------------------------------|--|
| Model Identification | PL-CP102 |
| Standard Capacity | 30ml (Custom volumes available) |
| Primary Material | 100% Virgin PTFE (Polytetrafluoroethylene) |
| Accessory Compatibility | FEP (Fluorinated Ethylene Propylene) Extension Tubing |
| Drive Compatibility | Automated Syringe Pumps / Manual Operation |
| Fabrication Method | End-to-end precision CNC machining |
| Chemical Compatibility | Universal (Except molten alkali metals and elemental fluorine) |
| Operating Temp Range | Customizable based on sealing requirements |
| Connection Ports | Customizable (Standard Luer, Threaded, or Barb) |
| Plunger Type | PTFE Solid-Core or Tipped (Bespoke designs available) |
| Seal Configuration | High-interference machined fit |