

Pfa Anti Splash Ball High Temperature Hf Resistant Laboratory Buffer Vessel For Distillation And Trace Analysis

Item Number: PL-CP428



Introduction

Premium PFA anti-splash buffer balls offer unmatched chemical resistance and thermal stability for laboratory distillation. These customizable safety vessels protect high-purity samples from contamination and hazardous bumping in rigorous chemical processing environments.

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Application	Description	Key Benefit
Trace Metal Analysis	Used in the digestion and distillation of high-purity acids for analytical chemistry.	Prevents metallic contamination common in glass vessels.
Semiconductor Etching	Handling and buffering of hydrofluoric acid solutions used in wafer cleaning.	Complete resistance to HF which dissolves glass.
Rotary Evaporation	Serving as a safety trap between the evaporating flask and the vapor tube.	Protects the rotary evaporator system from bumping/foaming.
Pharmaceutical R&D	Synthesis of sensitive compounds requiring high-temperature reflux environments.	Ensures purity by eliminating leachable contaminants.
Petrochemical Testing	Distillation of volatile hydrocarbons and acidic crude oil components.	Durability in high-temperature, high-pressure environments.
Environmental Monitoring	Concentration of water samples containing trace pollutants and corrosive additives.	High recovery rates due to non-stick surface properties.
Hydrothermal Synthesis	Acts as a buffer in specialized low-pressure reactor configurations.	Reliable performance under sustained thermal stress.

Feature	Specification Details (PL-CP428)
Product Item Number	PL-CP428
Primary Material	High-Purity Perfluoroalkoxy (PFA)
Nominal Capacity	250ml (Customizable to user requirements)
Operating Temperature Range	-200°C to +260°C
Chemical Resistance	Universal (HF, Strong Acids/Bases, Solvents)
Fabrication Method	Precision CNC Machined / Molded Components
Safety Certification	Explosion-proof, Shatter-resistant construction
Joint Compatibility	Fully customizable (Standard Taper, Threaded, or Flanged)
Surface Finish	High-gloss, ultra-smooth hydrophobic finish
Trace Analysis Compatibility	Grade 1 / Semiconductor Grade