

Customizable High Temperature Resistant Anti Static Ptfе Insulating Gaskets Flame Retardant Corrosion Proof Industrial Seals

Item Number: PL-CP286



Introduction

Optimize your industrial sealing with our high-temperature resistant and anti-static PTFE insulating gaskets. Engineered for extreme chemical environments, these flame-retardant seals offer customizable dimensions to meet rigorous procurement specifications for demanding fluid handling and critical laboratory applications globally available now.

[Learn More](#)

Application	Description	Key Benefit
Semiconductor Fabrication	Used in wafer cleaning and etching equipment where high-purity chemicals and anti-static safety are paramount.	Prevents contamination and ESD damage to sensitive silicon wafers.
Chemical Processing	Seals for glass-lined reactors, flanged piping, and storage tanks handling aggressive acids or bases.	Eliminates leak paths and resists chemical attack for extended service life.
Pharmaceutical Manufacturing	Integrated into cleanroom fluid transfer systems and synthesis reactors requiring FDA-compliant materials.	Ensures zero leaching and maintains sterile process integrity.
Power Distribution	Provides insulating spacers and seals in high-voltage transformers and electrical enclosures.	High dielectric strength prevents electrical arcing and short circuits.
Laboratory Instrumentation	Specialized gaskets for high-pressure digestion vessels and electrochemical cells.	Maintains a leak-proof seal under extreme thermal and chemical stress.
Cryogenic Engineering	Sealing components for liquid nitrogen and oxygen handling systems in aerospace and research.	Remains ductile and effective at ultra-low temperatures without becoming brittle.
Oil and Gas Refineries	Critical seals in flammable gas transport lines where anti-static properties are a safety mandate.	Mitigates the risk of static-induced ignition in hazardous zones.

Attribute	Detailed Specification for PL-CP286
Model Identifier	PL-CP286
Primary Material	High-Purity Polytetrafluoroethylene (PTFE)
Additives	Anti-static / Electrostatic Dissipative (ESD) Agents
Temperature Range	Customizable based on grade (Standard -200°C to +260°C)
Dielectric Strength	>18 kV/mm (Insulating Grade)
Surface Resistivity	Customizable to Anti-static or Insulating requirements
Chemical Resistance	Full resistance to nearly all acids, alkalis, and organic solvents
Flame Retardancy	UL 94 V-0 Equivalent
Water Absorption	<0.01%

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Coefficient of Friction	0.05 to 0.10	
Tensile Strength	Customizable to application requirements	
Internal Diameter (ID)	Fully Customizable (CNC Machined)	
Outer Diameter (OD)	Fully Customizable (CNC Machined)	
Thickness Range	Fully Customizable (CNC Machined)	
Surface Finish	Smooth, non-porous, and high-precision finish	
Compliance	Industrial standard material certifications available upon request	