

Fusion™ 707

Minimal Contamination in FPD Processing

Specifically developed for flat panel display CVD and dry plasma etch equipment where seal reliability and minimal contamination are essential, Fusion™ 707 fluoroelastomer provides excellent chemical compatibility and withstands a variety of aggressive chemicals. Available in an infinite range of geometries and cross-sections, it offers the diversity required for a variety of dynamic or static dry processing applications. Fusion™ 707 remains stable at service temperatures up to 428°F (220°C) and is ideally suited for large lid seals and bonded slit valve door seals.



Typical Properties	
Physical Properties	Typical
Color	Blue
Polymer Type	Fluoroelastomer
Specific Gravity	1.90
Hardness, Shore A*	75
Mechanical	
Tensile Strength, psi (kPa)	3582 (24700)
Elongation, %	245
Modulus, psi (kPa)	
Modulus @ 50% Elongation	339 (2337)
Modulus @ 100% Elongation	771 (5316)
Compression Set: 70 Hours @ 400°F (204°C) @ 25% Deflection, %	24
Thermal	
Service Temperature Range	-4°F to 428°F (-20°C to 220°C)

Not to be used for specification purposes.

Unless otherwise indicated, all tests are performed on AS 568A (-214) o-rings.

** Test performed on button samples.*

Note: Color variations and dark spots that might be observed in Fusion™ parts are considered cosmetic and an inherent result of the polymer curing process. They are not foreign matter and not anticipated to adversely affect the performance of the part in service. Please contact a Greene Tweed applications engineer for additional information.

Features and Benefits

- Withstands a variety of aggressive chemicals for long service life
- Minimal contamination due to seal degradation or metallic ion content
- Extends in-use seal life between preventative maintenance cycles over conventional carbon-black-filled elastomers
- Excellent physical properties
- Unlimited design flexibility

Applications

- Endpoint windows
- Valve seals
- KF fitting seals
- Window seals
- Lid seals
- Gas inlet seals
- Slit valve seals
- Chamber seals

Recommended Process Applications

- Deposition (CVD, PECVD, RPCVD, HDPCVD, APCVD, SACVD, DCVD)
- Dry plasma etch
- Remote plasma cleans

Contact Us

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