

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.



Fusion® 707 Typical Properties	
Physical Properties	
Color	Blue
Polymer Type	Fluoroelastomer
Specific Gravity	1.90
Hardness, Shore A*	75
Mechanical	
Tensile Strength, psi (kPa)	3582 (24,700)
Elongation, %	245
Tensile Modulus, psi (kPa)	
Modulus @ 50% Elongation	399 (2337)
Modulus @ 100% Elongation	771 (5316)
Compression Set: 70 Hours @ 400°F (204°C) @ 25% Deflection, %	24
Thermal Properties	
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 & 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-blackfilled elastomers
- Excellent physical properties
- Unlimited design flexibility

Applications

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

Recommended Process Applications

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

Greene Tweed

1684 South Broad Street, Lansdale, PA 19446 USA | Phone: (+1) (215) 256-9521

gtweed.com

Statements and recommendations in this publication are based on our experience and knowledge of typical applications of this product and shall not constitute a guarantee of performance nor modify or alter our standard warranty applicable to such products.

© 2024, Greene Tweed all rights reserved. All trademarks are property of their respective owners. 11/24-GT DS-US-SC-151