

Fusion™ 742

Versatile High Performance Fluoroelastomer

Fusion™ 742 performs well in aggressive chemicals and where ultrapure materials are not required. Recommended for conventional wet and dry system applications, Fusion™ 742 has a good field performance history in both dynamic and static applications. Its mid-range durometer allows the seal to conform to a wide range of hardware features.

Typical Properties	
Physical Properties	Typical
Color	Black
Polymer Type	Fluoroelastomer (FKM)
Specific Gravity	1.82
Hardness, Shore A*	75
Mechanical	
Tensile Strength, psi (kPa)	2050 (14135)
Elongation, %	182
Tensile Modulus, psi (kPa)	
Modulus @ 50% Elongation	600 (4137)
Modulus @ 100% Elongation	1026 (7074)
Compression Set: 70 Hours @ 204°C @ 25% Deflection, %	20
Thermal	
Continuous Service Temperature Range	-22°F to 392°F (-30°C to 200°C)
Excursion Service Temperature Range	-22°F to 482°F (-30°C to 250°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

- Outstanding physical properties
- Conforms well to hardware features
- Good performance history in aggressive chemicals

Applications

- Bonded slit valve doors
- Chamber seals
- Door seals
- Window seals
- Lid seals
- Gas inlet seals
- KF fitting seals
- Valve seals
- Gaskets
- Fitting and union seals

Recommended Process Applications

- Metalization (CVD, PVD, sputtering, evaporation)
- Ion implant
- Oxidation (LPCVD)/diffusion
- Deposition (CVD, PECVD, RPCVD, HDCVD, APCVD, SACVD, DCVD)
- Dry plasma etch
- Dry ashing
- Wet etch (acid, base)
- Wet metal plating
- Implant anneal

Contact Us

Greene Tweed
Kulpsville, PA, USA

Tel: +1.215.256.9521
Fax: +1.215.256.0189

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