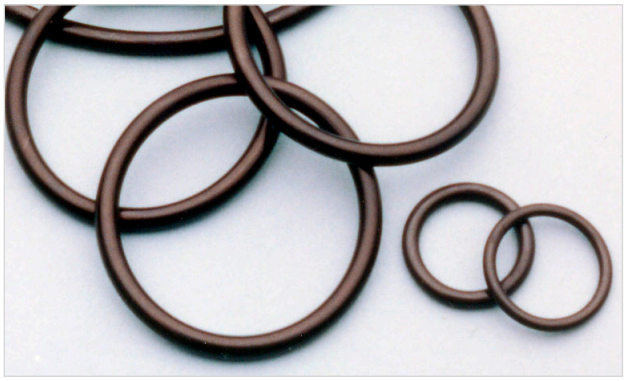
FLUOROELASTOMER 742

Versatile High Performance Fluoroelastomer

SEALING SOLUTIONS

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



FEATURES & 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

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.

Prior to actual use it is recommended compatibility tests be run to determine suitability in a specific application. This is critical where failure could result in injury or damage. A regular program of inspection and replacement should be implemented. Greene, Tweed technical personnel are available to help with a recommendation.

TYPICAL PROPERTIES*

Physical	Typical Value
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 @ 204ºC @ 25% Deflection, %	20
Thermal	
Continuous Service Temperature Range	-30ºC to 200ºC (-22°F to 392°F)
Excursion Service Temperature Range	-30°C to 250°C (-22°F to 482°F)

* Note: Unless otherwise indicated, all tests are performed on AS 568A (-214) O-rings.

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