



CHEMRAZ® E38

Minimal Contamination in Dry Plasma Processes

SEALING SOLUTIONS

Chemraz® E38 was specifically developed for high-density plasma systems and diffusion processes where seal reliability and very minimal contamination are essential. The material provides excellent chemical compatibility and withstands a variety of aggressive chemicals. Available in an infinite range of geometries and cross sections, this material offers the diversity required for a variety of dynamic or static dry processing applications. Recommended for slit valves, Chemraz E38 remains stable at service temperatures as high as 260°C (500°F) where high sealing loads are not used.

FEATURES & BENEFITS

- Minimal contamination
- Withstands a variety of aggressive chemicals
- Excellent physical properties
- Low metal ion content
- Unlimited design flexibility

APPLICATIONS

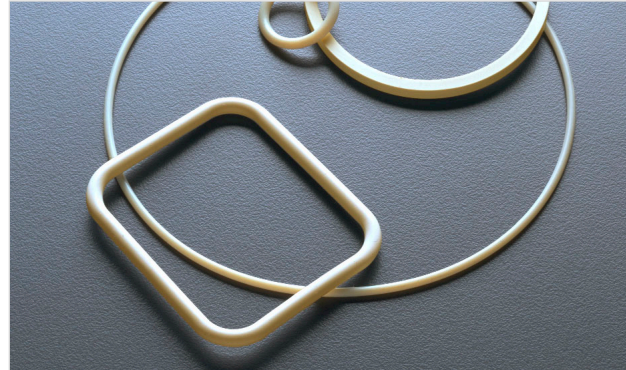
- Bonded gate seals
- Chamber seals

RECOMMENDED PROCESS APPLICATIONS

- **Deposition (CVD, PECVD, RPCVD, HDPCVD, APCVD, SACVD, DCVD)**
- **Remote plasma cleans**
- Oxidation (LPCVD)
- Diffusion
- Metalization (CVD, PVD, sputtering, evaporation)
- Dry plasma etch
- Dry ashing
- Ion implant
- Implant anneal
- Rapid thermal processing (RTP)

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	White
Polymer Type	Perfluoroelastomer
Specific Gravity	1.99
Hardness, Shore A	80
Mechanical	
Tensile Strength, psi (kPa)	2200 (15169)
Elongation, %	150
Tensile Modulus, psi (kPa)	
Modulus @ 50% Elongation	410 (2827)
Modulus @ 100% Elongation	1100 (7585)
Compression Set: 70 hours @ 204°C @ 25% Deflection, %	21
Thermal	
Service Temperature Range	-20°C to 260°C (-4°F to 500°F)

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

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