



Chemraz® G38

Minimal Contamination in Dry Plasma Etching Processes

Chemraz® G38 is developed for high-density plasma systems where seal reliability and minimal contamination are essential. It provides excellent chemical compatibility and withstands a variety of aggressive chemicals. Available in a range of geometries and cross-sections, Chemraz® G38 offers the diversity required for dynamic or static dry processing applications. Recommended for slit valves and long term service temperatures up to 437°F (225°C).



Typical Properties	
Physical Properties	
Polymer Type	Perfluoroelastomer
Color	Off-White
Manufacturing Method	Compression Molded
Hardness (Buttons, ASTM D2240)	79 Shore A
Mechanical	
Tensile Strength, (ASTM D1414)	2950 psi
Elongation, (ASTM D1414)	165%
100% Modulus, (ASTM D1414)	1477 psi
Compression Set, (25% deflection, 70hr 204°C in air)	30%
Temperature	
Maximum Service Temperature	260°C
Long-Term Service Temperature	225°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 Chemraz® 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

- 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

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