



CHEMRAZ[®] 543

Universal Compound for Conventional Applications

SEALING SOLUTIONS

Chemraz[®] 543 is recommended for a wide variety of semiconductor equipment dry processing applications where seal reliability with minimal contamination is required. It offers excellent performance in etching, metalization and diffusion processes where temperatures do not exceed 210°C (410°F). Additionally, the hardness of this material allows for some hardware finish inconsistency.

FEATURES & BENEFITS

- Good plasma resistance
- Good physical properties
- Minimal contamination
- Excellent performance as a “universal product”

APPLICATIONS

- Door seals
- Slit valves
- Window seals
- Isolator valve seals
- Lid seals
- Gas inlet seals
- KF fitting seals

RECOMMENDED PROCESS APPLICATIONS

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



TYPICAL PROPERTIES*	
Physical	Typical Value
Color	White
Polymer Type	Perfluoroelastomer
Specific Gravity	2.21
Hardness, Shore A	80
Mechanical	
Tensile Strength, psi (kPa)	1700 (11722)
Elongation, %	175
Tensile Modulus, psi (kPa)	
Modulus @ 50% Elongation	570 (3930)
Modulus @ 100% Elongation	1055 (7273)
Compression Set, 70 hours @ 204°C @ 25% Deflection, %	25
Thermal	
Service Temperature Range	-30°C to 210°C (-22°F to 410°F)

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

Contact Us

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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.