

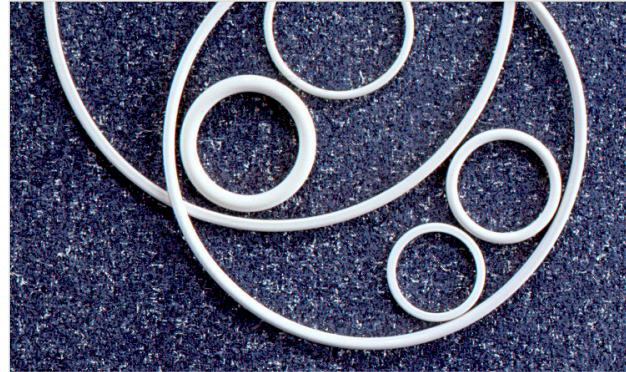


CHEMRAZ® 513

Universal Compound for Conventional Applications

SEALING SOLUTIONS

Chemraz® 513 is recommended for a wide variety of semiconductor equipment dry processing applications where seal reliability with minimal contamination is required. This material offers excellent performance history in static plasma, photolithography and diffusion processes where temperatures do not exceed 210°C (410°F) and high-sealing loads are not used. The hardness of this material allows for some hardware finish inconsistency.



FEATURES & BENEFITS

- Good plasma resistance
- Good physical properties
- Minimal contamination
- Excellent performance history as “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	2.22
Hardness, Shore A	80
Mechanical	
Tensile Strength, psi (kPa)	1600 (11032)
Elongation, %	165
Tensile Modulus, psi (kPa)	
Modulus @ 50% Elongation	540 (3723)
Modulus @ 100% Elongation	1050 (7239)
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.

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.

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