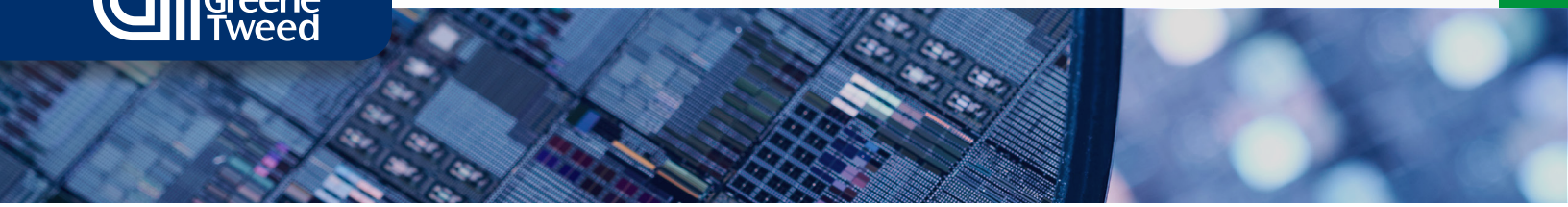


Chemraz® 520

For Harsher Chemistries and Higher Sealing Loads

Chemraz® 520 is recommended for a wide variety of semiconductor equipment dry processing applications where seal reliability with minimal contamination is required. Chemraz® 520 offers excellent performance in static and dynamic plasma and diffusion processes as well as static photolithography processes. Chemraz® 520 is formulated for use in high sealing load applications and where temperatures do not exceed 464°F (240°C). Due to the hardness of this material, low-temperature applications may require smoother hardware surface finishes of 10 microinches (Ra) and below.

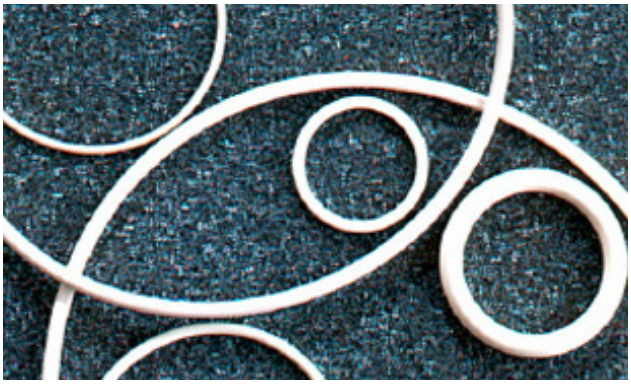
Typical Properties	
Physical Properties	**Typical**
Color	White
Polymer Type	Perfluoroelastomer
Specific Gravity	2.10
Hardness, Shore A*	90
Mechanical	
Tensile Strength, psi (kPa)	1950 (13345)
Elongation, %	110
Tensile Modulus, psi (kPa)	
Modulus @ 50% Elongation	990 (6826)
Modulus @ 100% Elongation	1780 (12273)
Compression Set, 70 Hours @ 204°C @ 25% Deflection, %	35
Thermal	
Service Temperature Range	-22°F to 464°F (-30°C to 240°C)

Unless otherwise indicated, all tests are performed on AS 568A (-214) o-rings.

Not to be used for specification purposes.

** 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 and Benefits

- Excellent plasma resistance
- Outstanding physical properties
- Low contaminants
- Withstands higher sealing loads
- Excellent performance history in higher temperature applications

Applications

- Door seals
- Slit valves
- 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
- Oxidation (LPCVD)/diffusion
- Implant anneal
- Rapid thermal processing (RTP)

Contact Us

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