

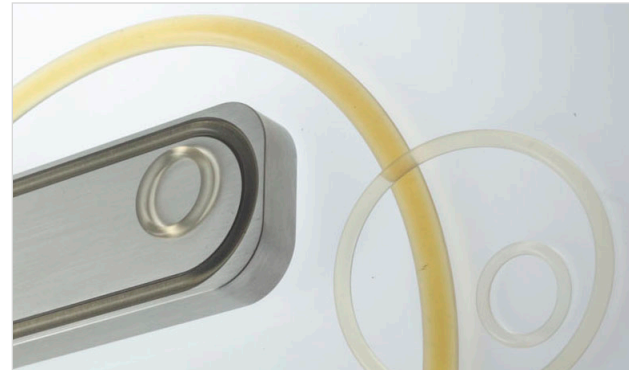


CHEMRAZ® 656

Low Metallic Ion Content

SEALING SOLUTIONS

Chemraz 656 is a low durometer perfluoroelastomer primarily designed for Bonded Slit Valve gates and special engineered applications such as low sealing forces/tolerance stackups where softer materials aid in the total seal solution. Developed from an advanced polymer utilizing fluoropolymer nano-composite technology particles, Chemraz 656 has very low metallic ion levels and offers unsurpassed resistance to today's advanced process chemistries. Chemraz 656 is recommended for use in CVD, Etch and diffusion equipment applications.



FEATURES & BENEFITS

- Excellent plasma resistance
- Soft material for low sealing forces and tolerance stackups
- High purity, very low metallic ion content

APPLICATIONS

- Bonded slit valve gates
- Chamber seals
- Window seals
- Gas inlet seals
- Lid seals

RECOMMENDED PROCESS APPLICATIONS

- **Deposition (CVD, PECVD, RPCVD, HDPCVD, APCVD, SACVD, DCVD)**
- **Dry plasma etch**
- **Remote plasma cleans**
- Dry ashing
- Oxidation (LPCVD)
- Diffusion
- Metalization (CVD, PVD, sputtering, evaporation)

TYPICAL PROPERTIES*	
Physical	Typical Value
Color	Translucent
Polymer Type	Perfluoroelastomer
Specific Gravity	2.05
Hardness, Shore A	70
Mechanical	
Tensile Strength, psi (kPa)	1504 (10370)
Elongation, %	238
Tensile Modulus, psi (kPa)	
Modulus @ 50% Elongation	209 (1441)
Modulus @ 100% Elongation	384 (2648)
Compression Set: 70 hours @ 204°C @ 25% Deflection, %	24
Thermal	
Service Temperature Range	-20°C to 232°C (-4°F to 450°F)

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

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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.