

Chemraz® 555

Broad Chemical Resistance at Elevated Temperatures



Applications

- Abatement Systems
- Compressors
- Controls/instrumentation
- Foreline Seals
- ISO/NW/KF Fittings
- Mechanical seals
- Mixers
- Pump housings
- Quick connect couplings
- Reactors
- · Sampling/metering equipment
- Sprayers/dispensers
- Valves

Superior Compression Set Resistance

With its broad chemical resistance, Chemraz® 555, a perfluoroelastomer, is ideally suited for challenging fluid handling applications. Chemraz® 555 provides a significantly wider operational band and superior compression set resistance than any other broad range perfluoroelastomer on the market. With an upper temperature limit of 600°F (316°C), Chemraz® 555 is the elastomer of choice for the most demanding services found in the chemical process and refining industries and semiconductor SubFabs.

Chemraz® 555 is suitable for use in a wide variety of media, including acids, caustics, aldehydes, esters, ethers, aromatics, hot water, steam, amines, methanol, ketones, TBA, MTBE, and mixed process streams. Chemraz® 555 is one of Greene Tweed's many cost-effective products and services that extend the reliability and life of our customers' equipment in hostile conditions while protecting the public and

Chemraz® 555 is available in o-rings, gaskets, and many other custom shapes.



KF Fittings for the Subfab

Features and Benefits

- Superior high-temperature capability (600°F/316°C) combined with broad chemical resistance in a wide range of media
- · Outstanding physical properties allow for robust designs in various applications
- Excellent compression set maintains seal integrity in wide temperature and pressure variations as well as vibration
- Breadth of service capabilities can reduce the number of products in inventory through seal standardization
- · Longer and better seal integrity in seal applications lower the lifecycle cost of the equipment





Typical Properties	
Physical Properties (ASTM Standard)	Typical
Color	Black
Specific Gravity (D792)	2.00
Hardness, Type A, Points (D2240)	80
Mechanical (ASTM Standard)	
Compression Set, 22 Hours @ 400°F (204°C), in Air, % of Original Def.,Buttons (D395)	12.5
Compression Set, 70 Hours @ 400°F (204°C), in Air, % of Original Def., (D1414)	21.6
Elongation @ Break, % (D1414)	165
Modulus @ 50% Elongation, psi (MPa) (D1414)	505 (3.5)
Modulus @ 100% Elongation, psi (MPa) (D1414)	1,565 (10.8)
Tensile Strength @ Break, psi (MPa) (D1414)	3,175 (24)
Thermal	
Service Temperature Range, °F (°C)	10°F to 600°F (-12°C to 316°C)

^{*} Unless otherwise indicated, all tests are performed on -214 o-rings. All test results are preliminary.

The following chart compares compression set resistance of Chemraz $^{\circ}$ 555 and several other materials currently on the market.



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