

Chemraz® SD517

Ultra-Clean, High-Compatibility Seals for Pharma, Biotech and Food Process Engineering

Material Description

Chemraz® SD517 is a white, high-purity, synthetic, fluorinated rubber with comparable chemical compatibility to polytetrafluoroethylene (PTFE). Chemraz® SD517 is a choice material for high-performance seals and custom flexible shapes in pharma, biotech, and food applications with comprehensive compliance.

In applications where EPDM, silicone, or FKM seals are unsuitable or require multiple replacement each year, Chemraz® SD517 can dramatically improve process reliability and safety.

Typical Properties	
Physical Properties (ASTM Standard)	Typical
Color	White
Specific Gravity (D297)	2.22
Hardness, Shore A (D2240)	80
Mechanical (ASTM Standard)	
Tensile Strength, psi (D1414)	1,600
Elongation, % (D1414)	165
Tensile Modulus, psi	
Modulus @ 50% Elongation (D1414)	540
Modulus @ 100% Elongation (D1414)	1,050
Compression Set, 70 Hours @ 400°F (204°C), 25% Deflection, % (D395)	25
Thermal	
Minimum Service Temperature	-22°F (-30°C)
Maximum Service Temperature	428°F (220°C)



Compliance & Quality

Parts made from Chemraz® SD517 offer compliance for pharma, biotech, and food industries:

- Animal-Derived, Ingredient Free (ADI Free)
- FDA Food Contact Number (FCN) 247
- FDA 21 CFR 177.2400 (d), Extractive Limitations for Perfluorocarbon-Cured Elastomers
- USP <87> and <88> Class VI Biological Reactivity Tests
- 3-A 18-03, Product Contact Surfaces in Dairy Equipment, Sections C & D for Class I Rubber Material

Upon request, we can advise on Chemraz® SD517 compliance to other standards. When required, our experienced staff of rubber formulation experts can develop Chemraz® for additional compliance and performance requirements.

Greene Tweed manufactures parts from Chemraz® SD517 in a fully traceable ISO 9001:2015 quality management system (QMS), using validated, documented processes. All Chemraz® SD517 parts are prepared, washed, and packaged in an ISO 7 cleanroom or better.

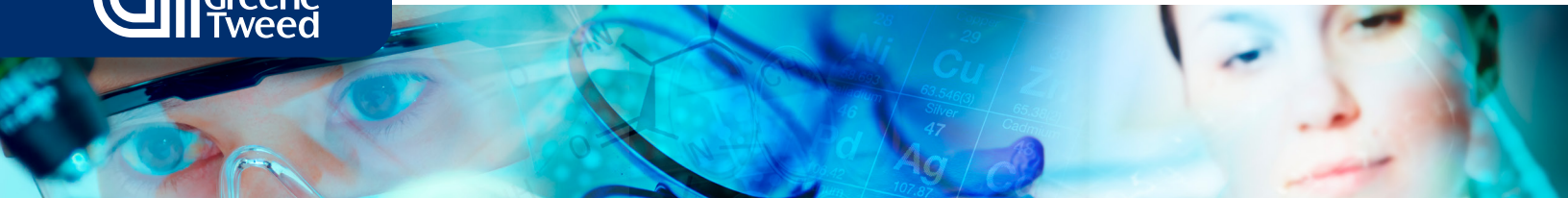
Contact Us

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Chemical Compatibility

Chemraz® SD517 offers exceptional chemical resistance. Greene Tweed has collected Chemraz® SD517 compatibility data, which can be viewed on our [website](#). Our application engineers can also advise on suitability for other compounds and conditions. [Contact us for more information](#).

How to Use Chemraz® SD517

Chemraz® SD517 can be ordered as standard seals (e.g., o-rings, gaskets), sheets, and custom shapes, as well as parts of complex assemblies with other components.

Our team is ready to learn about your application and ensure your design or process succeeds. We offer exceptional support to our customers:

- Design and process guidance, optimization, and troubleshooting
- Rapid 3D printing form and fit prototypes
- Performance testing and documentation to support validation
- Validated manufacturing processes
- Change control agreements
- Manufacturing facility and quality system audits

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