

# CHEMRAZ® SD625

## FDA & USP CLASS VI COMPLIANT

Chemraz® SD625, a black-colored perfluoroelastomer, offers the broadest chemical resistance of any elastomer, combining the resilience and sealing force of an elastomer with chemical resistance and low extractables similar to PTFE. Not only is it FDA and USP Class VI compliant, but Chemraz SD625 also passes USP Physico-chemical Testing, USP <661>, and has been tested to USP elastomeric closures, USP <381>, making it the most comprehensively tested perfluoroelastomer on the market. Critical applications and difficult seal replacement locations where maximizing MTBR (mean time between replacement) is paramount will benefit greatly from Chemraz SD625.

With its outstanding performance in high temperatures, Chemraz SD625 delivers excellent performance in hot water and steam and in CIP/SIP processes. Chemraz SD625 is also well suited for dynamic applications.

Chemraz components are available for use as O-rings, gaskets, sanitary seals and many other custom shapes.

## FEATURES & BENEFITS

- Superior high temperature properties
- Outstanding resistance in steam over 302°F (150°C) and in CIP/SIP processes
- Outstanding hot water & steam resistance
- 3-A® and FDA compliance meeting the highest purity standards

### EXTRACTION DATA (in mg/in<sup>2</sup>)

Medium	FDA Limitations		Chemraz SD625	
	Total	Fluoride	Total	Fluoride
Distilled Water	≤ 0,2	≤ 0,03	0,03	< 0,0004
Ethanol, 50%	≤ 0,2	≤ 0,03	0,03	< 0,0003
n-Heptane	≤ 0,2	≤ 0,03	0,01	< 0,0003



TYPICAL PROPERTIES		
Physical Properties	ASTM Method	Typical Value
Color		Black
Specific Gravity	D297	2.00
Hardness, Shore A, Points	D2240	80
Mechanical		
Compression Set, 70 hours @ 400°F (204°C) @ 25% Deflection, %	D1414	23
Elongation, %	D1414	135
Modulus @ 50% Elongation, psi (MPa)	D1414	650 (4.5)
Modulus @ 100% Elongation, psi (MPa)	D1414	1,900 (43.4)
Tensile Strength @ Break, psi (MPa)	D1414	3,200 (22.1)
Thermal		
Service Temperature Range, °F (°C)		-4°F to 500°F (-20°C to 260°C)

## APPLICATIONS

- Mechanical seals
- Valves
- Pumps
- Mixers
- Fermenters
- Biomedical equipment
- Couplings



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