Freudenberg-NOK
Sealing Technologies
Simrit

Material Properties:
Simriz® 495 (FFKM)

NOTE - All testing done on AS568-214 size O-rings

Temperature Range: -5°C to +230°C

NOTE: Simriz 495 offers outstanding chemical and solvent resistance including compatibility with Nitric Acid and amine chemicals. It also exhibits excellent heat resistance up to 230°C.

Original Properties	Simriz 495
Color	Black
Hardness, Shore A, ASTM D2240	83
Tensile Strength, Mpa, ASTM D1414	18.0
Tensile Strength, psi, ASTM D1414	2610
% Elongation change, ASTM D1414	160
100% Modulus, Mpa, ASTM D1414	10.9
100% Modulus, psi, ASTM D1414	1580
Compression Set, ASTM D395 Method B and ASTM D1414	
% of Original Deflection, 70 hrs. at 200°C	23
% of Original Deflection, 70 hrs. at 230°C	35
Compression Set in 69% Nitric Acid at 80C, ASTM D395 Method B and ASTM D1414	
% Permanent set, 70 hrs.	2%
% Permanent set, 160 hrs.	2%
% Permanent set, 300 hrs.	3%
% Permanent set, 500 hrs.	4%
% Permanent set, 700 hrs.	4%
% Permanent set, 1000 hrs.	4%
Nirtic Acid 20% Immersion, ASTM D471, 70 hrs. at 100°C	
% Volume change, ASTM D471	+1.3
Sulfuric Acid 5% Immersion, ASTM D471, 70 hrs. at 80°C	
% Volume change, ASTM D471	+0.4
Water Bomb Immersion, ASTM D471, 70 hrs. at 200°C	
% Volume change, ASTM D471	+6.9
Low Temperature Glass Transition Temperature, ASTM D3418	
DSC Tg, C	-7°C

www.simrit.com
866-274-6748

Freudenberg-NOK
Sealing Technologies

Air Oven Aging, ASTM D573 and ASTM D1414, 70 hrs. at 290°C		
Hardness change, Shore A, ASTM D2240	± 5	0
% Tensile Strength change, ASTM D1414	-20 max.	-3
% Elongation change, ASTM D1414	-5 max.	+2
% Weight change, ASTM D297	-5 max.	-0.5
Compression Set, ASTM D395 Method B and ASTM D1414 70 hrs. at 230°C		
% Permanent set	40 max.	19.5
Low Temperature Retractions, ASTM D-1329		
TR-10, degrees C	+5 max.	0
Special Testing, not part of AMS 7257C		
Compression Set, ASTM D395 Method B and ASTM D1414 70 hrs. at 600°F, 25% squeeze		
% Permaent Set		40
Cracking or rupture		NONE