

Material Profile: Simriz® 487

Simriz 487 was specifically developed for high temperature applications. Simriz 487 offers excellent chemical resistance and low extractables in a wide range of wet and dry environments.

Features and Benefits

- High temperatures capabilities
- Excellent chemical resistance
- Minimum extractables
- High physical properties
- Low compression set at elevated temperatures
- Cost-effective

Recommended Wet Processes

- Wafer preparation, cleaning and rinsing
- Etching
- Stripping
- Copper Plating



Black Perfluoroelastomer
Service Temperature Range: -6 to 300°C

Equipment Locations

- Door and Lid Seals
- Exhaust Valves
- Fittings
- Chemical Containers
- Filters
- Flow Meters
- Connectors
- KF Fittings

Typical Physical Properties

Color	Black
Shore A Durometer	75
Tensile Strength, psi (MPa)	2700 (18.6)
Elongation	170%
Modulus at 100% Elongation, psi (MPa)	1250 (8.6)
Compression Set: 70 hrs. at 275°C	26%
Service Temperature Range, °C (°F)	-6 to 300 (21 to 570)

NOTE - International Seal, Co. (ISC) is a wholly owned subsidiary of Freudenberg-NOK.

The information contained herein is believed to be reliable, but no representation, guarantees or warranties of any kind are made to its accuracy or suitability for any purpose. The information presented herein is based on laboratory testing and does not necessarily indicate end product performance. Full scale testing and end product performance are the responsibility of the user.

Pub#2502PIC
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Material Properties: Simriz® 487 (FFKM)

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

Original Properties	Simriz 487
Color	Black
Hardness, Shore A, ASTM D2240	79
Tensile Strength, MPa, ASTM D412 Die C	18.7
Tensile Strength, psi, ASTM D412 Die C	2710
% Elongation change, ASTM D412 Die C	170
100% Modulus, Mpa, ASTM D412 Die C	8.6
100% Modulus, psi, ASTM D412 Die C	1245
Low Temperature Glass Transition Temperature, ASTM D3418	
Tg (degrees C)	0
Low Temperature Retraction, ASTM D1329	
TR-10, degrees C	0
Air Aging ASTM D573, 70 hrs. at 250°C	
Hardness change, Shore A, ASTM D2240	0
% Tensile Strength change, ASTM D1414	-13
% Elongation change, ASTM D1414	+24
% Weight loss, ASTM D573	1.0
Compression Set, ASTM D395 Method B and ASTM D1414	
% Permanent Set, 70 hrs. at 275°C	26
% Permanent Set, 300 hrs. at 275°C	44
% Permanent Set, 70 hrs. at 300°C	29
% Permanent Set, 300 hrs. at 300°C	43
Water Bomb Fluid Immersion, ASTM D471, 70 hrs. at 200°C	
% Volume change, ASTM D471	+1.9

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