

Material Profile: Simriz® 134

Simriz 134 is a high strength, high durometer perfluoroelastomer developed for CPI and HPI applications. Simriz 134 offers wide chemical resistance.

Features and Benefits

- High strength
- High modulus
- Explosive decompression resistant
- Excellent chemical compatibility

Recommended Applications

- | | |
|-------------------------------------|---------------|
| ■ Acids | ■ Ethers |
| ■ Bases | ■ Esters |
| ■ Alcohols | ■ Ketones |
| ■ Aldehydes | ■ MEK |
| ■ Amines | ■ Nitric Acid |
| ■ Triethylamine | ■ Oxidizers |
| ■ Sodium Hydroxide | |
| ■ Steam/Hot Water | |
| ■ Chemical & Hydrocarbon Processing | |
| ■ Aromatic/Aliphatic Oils | |



Black Perfluoroelastomer
 Service Temperature Range: 21 to 570°F

Typical Physical Properties

Color	Black
Shore A Durometer	90
Tensile Strength, psi (MPa)	3120 (21.5)
Elongation	160%
Compression Set: 70 hrs. at 200°C	29%
Service Temperature Range, °C (°F)	-4 to 230 (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.

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Material Properties: Simriz® 134 (FFKM)

Original Properties	Simriz 134
Color	Black
Hardness, Shore A, ASTM D2240	90
Tensile Strength, MPa, ASTM D412 Die C	21.5
Tensile Strength, psi, ASTM D412 Die C	3117
Ultimate Elongation, %, ASTM D412 Die C	160
100 % Modulus, MPa, ASTM D412 Die C	16.6
100 % Modulus, psi, ASTM D412 Die C	2407
Temperature Retraction, ASTM D1329	
TR-10, degrees C	-4
Compression Set, ASTM D1414 and ASTM D395 Method B, AS568-214 size O-rings, 70 hours at 200°C	
% Permanent set	25
Compression Set, ASTM D1414 and ASTM D395 Method B, AS568-214 size O-rings, 1,000 hours at 200°C	
% Permanent set	40
Fluid Immersion - Water Bomb, ASTM D471, 70 hrs. at 200°C	
Volume Change, %	+4.5
Steam Immersion - closed vessel, ASTM D471, 1,000 hrs. at 160°C	
Volume Change, %	+3.0
69% Nitric Acid Immersion, ASTM D471, 70 hrs. at 80°C	
Volume Change, %	+7.0
Methyl Ethyl Ketone Immersion, ASTM D471, 70 hrs. at 80°C	
Volume Change, %	+3.1
Cyclohexyl Amine Immersion, ASTM D471, 70 hrs. at 40°C	
Volume Change, %	+1.5

Compatible with:

Aliphatic and aromatic hydrocarbons, Ketones, and esters, strong acids and bases, strong amines and corrosion inhibitors

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