

SIMRIZ® 134



Designed for thermal stability and nearly universal protection against chemical attack, Freudenberg–NOK's proprietary family of Simriz® perfluoroelastomer compounds offer premier sealing performance. Simriz® compounds approach PTFE chemical resistance while resisting high temperatures up to 325°C.

Freudenberg-NOK is the only vertically integrated supplier of perfluoroelastomer.

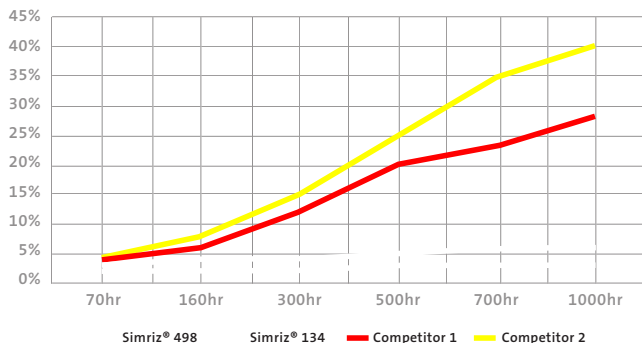
Traceable - Accountable – Customized - Controlled.

Simriz® 134 performs well in a wide variety of harsh chemicals. Its outstanding resistance against rapid gas decompression (RGD) makes Simriz® 134 the perfect match for high pressure gas applications.

NORSOK M-710 (rev. 2) Certified

Test Conditions	
Temperature	100°C (212°F)
Gas	90mol% Methane (CH ₄) 10mol% Carbon Dioxide (CO ₂)
Pressure Gradient	15MPa
Cycling	10 Cycles
Test Results	
Rating	No internal cracks No Blisters No Holes

Steam Resistance at 160°C/320°F



VALUES FOR THE CUSTOMER

- Combines RGD and broad chemical resistance as well as a high thermal stability
- Withstands extremely high pressure as well as steam sterilization and autoclaving
- NORSOK M710 rev.2 certified
- Without equal. Patented cross-linking system provides superior performance beyond the limits of every other competitor FFKM product
- Demonstrated performance. Successfully used in many customer applications
- Vertically integrated. Freudenberg-NOK Sealing Technologies is the only vertically integrated O-ring manufacturer in the world
- Cost efficient. As the only vertically integrated O-ring manufacturer down to the monomers Freudenberg-NOK Sealing Technologies is able to provide the most cost efficient FFKM O-rings

TYPICAL APPLICATIONS

- Pumps
- Valves
- Oilfield completion equipment
- Perforating equipment
- Drilling equipment
- Intervention tools
- Compressors



FEATURES AND BENEFITS

Mechanical Properties	
Hardness (Shore) DIN ISO 7619-1, Shore A, 23°C	90
Temp. Range in °C	-15°C to +230°C
Temp. Range in °F	+5°F to +446°F
Tensile Strength (psi)	3118
Tensile Strength (MPa)	21.5
Elongation (%)	160
Compression Set (%) 70hr at 204°C (400°F) per ASTM D395 - Method B	23
Chemical Environment	
Hot Water / Steam	++
Dry Heat	+
Organic Acid (e.g. Acetic Acid)	-
Inorganic Acids (e.g. Nitric Acid)	-
Alkalis / Bases	++
Acrylic or Vinyl Monomers	++
Amines	++
Hot Amines	++
Ketones	++
Ester	++
Ethers	++
Aldehydes	++
Hydrocarbons	++
Sour Gas (e.g. Hydrogen Sulfide, Peroxide)	++
Silanes and Chlorosilanes	++
Hot Lubricants	++
Strong Oxidizers (e.g. Nitric Acid, O ₃ , ClO ₃)	-
Fluorinated Fluids	++
Synthetic Oils	++
Alcohols	++

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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