

# SIMRIZ® 498

## THE ULTIMATE FFKM MATERIAL



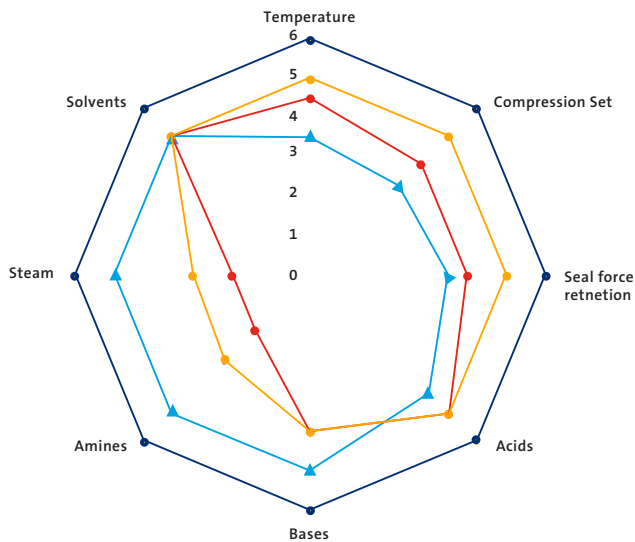
Designed for thermal stability and nearly universal protection against chemical attack, Freudenberg-NOK's proprietary family of Simriz® perfluoroelastomer compounds offer premier sealing performance. Simriz® compounds approach PTFE chemical resistance while resisting high temperatures up to 325°C.

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

Traceable - Accountable – Customized - Controlled.

**Simriz® 498** is the ultimate FFKM material. Its unique patented material structure provides an outstanding long-term performance in nearly every environment. No matter if it's extreme temperatures up to 325°C or harsh chemicals or even overheated steam and hot water. Simriz® 498 is the best match.

5=Competitor Materials best performance  
6=Simriz® 498 performance



- ▲ Competitor Material 1 (Strong Chemical Resistance)
- Competitor Material 2 (General Purpose)
- Competitor Material 3 (High Temperature)

## VALUES FOR THE CUSTOMER

- Superior long-term performance in extreme temperatures
- Broad chemical resistance in a large number of harsh chemical environments
- Outstanding performance under steam and hot water conditions
- 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

Nearly every FFKM O-ring application can be covered by Simriz® 498

- Mechanical Seals
- Pumps
- Valves
- Power Generation Equipment
- Dispensing Systems
- Spray Gun Equipment
- Downhole Oil and Gas



## FEATURES AND BENEFITS

Mechanical Properties	
Hardness (Shore) DIN ISO 7619-1, Shore A, 23°C	80
Temp. Range in °C	-6°C to +325°C
Temp. Range in °F	+21°F to +617°F
Tensile Strength (psi)	2700
Tensile Strength (MPa)	18.6
Elongation (%)	160
Compression Set (%) 70hr at 204°C (400°F) per ASTM D395 - Method B	12
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 <sub>3</sub> , ClO <sub>3</sub> )	++
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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