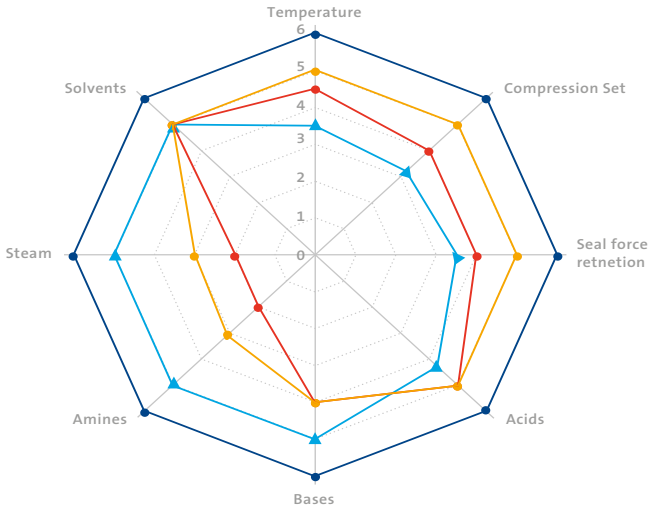
SIMRIZ® 498 THE ULTIMATE FFKM MATERIAL

Designed for thermal stability and nearly universal protection against chemical attack, Freudenberg'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 is the only vertically integrated supplier of perfluoroelastomer.
Traceable - Accountable – Customized - Controlled.

Simriz® 498 s 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 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 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

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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_3, ClO_3) -	++
Fluorinated Fluids	++
Synthetic Oils	++
Alcohols	++