

PERFREZ® 5002 (V80CK47) Product Data Sheet

Semiconductor applications

Our range of PERFREZ® high performance materials for semiconductor processes meets the most challenging and demanding applications for aggressive chemicals, gas and high temperatures. These materials offer excellent chemical and thermal resistance, thermal stability and high purity under these extreme process conditions.

We provide our customers with the highest quality products and technical support on seal design, material recommendation, installation techniques and test analysis, specifically for the semiconductor market.

V80CK47 FFKM is capable of handling harsh cleaning gases such as NF3 in applications where killer defect sizes are not as challenging. The PTFE improves the resistance to plasma yet maintains good physical properties. It is a good alternative for present and past chip designs.

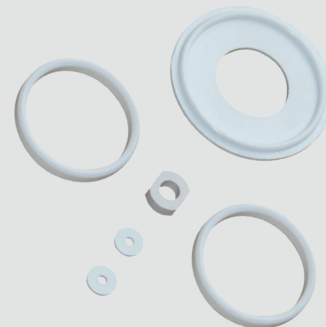
Basic Polymer: FKM (PTFE Filled)
Hardness: 80 +/- 5 Shore A
Temperature range: -20°C to +230°C
Colour: White

Key features

- Excellent oxygen and fluorine compatibilities
- Good plasma resistance
- Superior physical properties
- Low out-gassing
- Excellent abrasion resistance

Products

- High performance o-rings
- Special mouldings
- Rubber to metal moulding



Property	Results
Hardness (Shore A)	80 (+/- 5)
Elongation at break, %	198
Tensile Strength, psi (MPa)	1267 (8.74)
Modulus @ 100%, psi (MPa)	734 (5.06)
Specific Gravity (g/cm)	1.97
Min. Operating Temperature, °C (°F)	-20 (-4)
Max. Operating Temperature, °C (°F)	230 (446)
Compression Set @200°C,%	25

Applications

- Chamber Lid Seals
- Door Seals
- End Point Windows
- Gas Inlet Seals
- Isolator Valve Seals
- KF-Fittings
- Slit Valves
- Window Seals
- Gate Valve Seals

These results represent typical material properties and are not to be used for specification purposes. They are achieved under laboratory conditions and do not necessarily correspond to results measured on finished goods. It does not absolve the customer of the responsibility to make tests for their intended process or purpose. Ceetak Ltd makes no warranties and assumes no liability in connection with any use of this information.