PERFREZ® 6022 (CZ75C391) 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.

CZ75C391 FFKM is specially developed to handle aggressive oxygen and fluorine based exhaust gases while providing excellent thermal properties. It is specialized for both standard and customized NW/ISO fittings in subfab application as the best solution to be cost-effective as well as provide optimal sealing, along with the long life expectation of these type of sealing elements used across the sub-fab lines.

Basic Polymer: Perfluoroelastomer Hardness: 80 +/- 5 Shore A Temperature range: -20°C to +280°C Colour: Off-white

Key features

- Superior physical properties with low CTE value
- Assuring less extrusion, short life and leaks
- High temp capabilities specialised for heated lines
- Excellent oxygen and fluorine compatibility
- Maintains excellent resilience through life of seal

Products

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

Property	Results
Hardness (Shore A)	80 (+/- 5)
Elongation at break, %	264
Tensile Strength, psi (MPa)	2885 (19.9)
Modulus @ 100%, psi (MPa)	916 (6.32)
Coefficient of Thermal Expansion	2.74x10 ⁻⁴
Min. Operating Temperature, °C (°F)	-20 (-4)
Max. Operating Temperature, °C (°F)	280 (536)

Compatible Semicon Process

- Deposition: PECVD, APCVD, GDPCVD, RPCVD, SACVD
- Plasma: Oxide and Metal
- Ashing & Stripping
- RTP
- Diffusion
- Foreline & Abatement systems

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.

