

PERFREZ® MX7 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.

PERFREZ® MX7 is the newest material in a portfolio of products specially developed to handle extreme high temperature combined with aggressive oxygen and fluorine based plasma, while generating minimum particles.

Basic Polymer: Perfluoroelastomer
Hardness: 76 +/- 5 Shore A
Temperature range: -20°C to +310°C
Colour: Brown

Key features

- Superior physical properties with better Nitrile CTE values
- High temperature capabilities
- Excellent oxygen and fluorine compatibility
- Low metal content, manufactured with superior surface finishes

Products

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



Property	Results
Hardness (Shore A)	76 (+/- 5)
Tensile Strength, psi (MPa)	1771 (12.21)
Elongation at break, %	191
Modulus @ 100%, psi (MPa)	939 (6.47)
Coefficient of Thermal Expansion	3.09x10 ⁻⁴
Min. Operating Temperature, °C (°F)	-20 (-4)
Max. Operating Temperature, °C (°F)	310 (572)

Applications

- Chamber Lid Seals
- End Point Window Seals
- Isolator Valve Seals
- Slit Valve
- Door Seals
- Window Seals
- KF-Fittings Seals
- Gas Inlet 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.

