# PERFREZ® XL11 (CZ85CK45) Product Data Sheet
## Semiconductor applications

**ceetak**
sealing solutions

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.

CZ85CK45 FFKM offers superior plasma resistance especially aggressive fluorine based process. It also features the excellent physical properties with low CTE that mitigate any risk of extrusion due to thermal expansion.
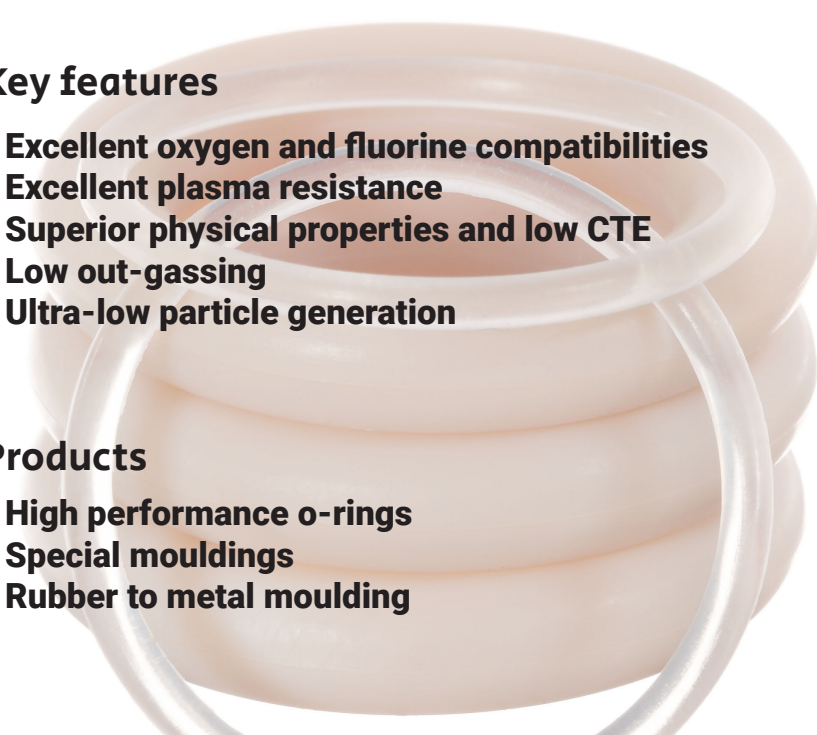
**Basic Polymer: Perfluoroelastomer**
**Hardness: 85 +/– 5 Shore A**
**Temperature range: –20˚C to +260˚C**
**Colour: Beige**

## Key features

- **Excellent oxygen and fluorine compatibilities**
- **Excellent plasma resistance**
- **Superior physical properties and low CTE**
- **Low out-gassing**
- **Ultra-low particle generation**

## Products

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

| Property | Results |
|---|---|
| Hardness (Shore A) | 85 (+/-5) |
| Elongation at break, % | 142 |
| Tensile Strength, psi (MPa) | 2425 (16.72) |
| Modulus @ 100%, psi (MPa) | 1708 (11.78) |
| Coefficient of Thermal Expansion | $2.27 \times 10^{-4}$ |
| Min. Operating Temperature, °C (°F) | -20 (-4) |
| Max. Operating Temperature, °C (°F) | 260 (500) |

## Applications

- **Bell Jar Seals**
- **Chamber Lid Seals**
- **Door Seals**
- **End Point Window Seals**
- **Gas Inlet Seals**
- **Isolator Valve Seals**
- **Slit Valves**
- **Window Seals**

**ceetak**
sealing solutions