

M SEALS ZC700

**Ultra-Low temperature RGD Resistant FFKM
Perfluoroelastomer**



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Oil and Gas compound



High Service Temperature



Chemical resistance



Low Temperature

Description

This compound has been developed to meet the severe service requirements of the Oil & Gas industry. The compound has similar chemical resistance to that of PTFE while providing elastomeric properties comparable to more standard Fluorocarbon rubbers.

ZC700 has been modified to provide ultra-low temperature properties along with RGD/ED (Rapid Gas Decompression / Explosive Decompression) resistance .

Physical Properties

Property	Test method	Unit	Typical value
Colour			Black
Density	ISO 2781	g/cm ³	1.90
Hardness	ISO 48	IRHD	93
Tensile Strength	ISO 37	MPa	14.2
Elongation at break	ISO 37	%	129
Compression set (24 Hours @ 204°C – 25% Strain)	ISO 815 A	%	18.9
Minimum service temperature		°C	-45
Maximum service temperature		°C	+240

Main Characteristics

- Ultra-low temperature use
- Excellent thermal resistance
- Broad chemical resistance similar to PTFE
- Good compression set resistance
- Excellent performance in harsh conditions

Typical Products

- O-Ring Seals
- X-Ring Seals
- Piston T-Seals
- Rod T-Seals
- Custom parts

Typical Applications

Due to its excellent low temperature flexibility, ZC700 Perfluoroelastomer (FFKM) can be used in a wide range of applications such as valves, offloading systems and wellhead equipment operating in extreme low temperature environments or applications sealing aggressive media.

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