

V61C

Ultra-low temperature fluoroelastomer



Description

V61C is a fluoroelastomer (FKM) material developed to offer increased efficiency and service life in low temperature applications.

V61C extends the operational performance of FKM seals by a full 15°C lower than is possible with traditional FKM grades and sets a new industry benchmark in low temperature performance.

V61C exhibits the same chemical and mechanical properties as conventional FKM grades and is available in almost any sized O-ring (standard and non –standard) and custom designed components.

Key Attributes

- ▶ With a glass transition of -40°C (-40°F), V61C offers the widest operating temperature range of -51°C to +225°C
- ▶ Low compression set giving excellent seal performance
- ▶ Good elongation properties making fitting easier even at low temperature
- ▶ Excellent resistance to petroleum, oil, silicone and di-ester liquids

Typical Applications

- ▶ Valves and pumps in cold operating environments
- ▶ Seal applications that are exposed to cold situations
- ▶ Applications that demand high variations in temperature

Other materials in the range

V71C where a harder material is required

V74C for the lowest available compression set

V75W for use when FDA materials are required

PPE Oilfield FKMs for the ultimate performance in high pressure applications

Perlast® perfluoroelastomers when resistance to aggressive chemicals and high temperatures are required



Typical Material Properties

Property	ASTM	ISO	Value
Material Type	FKM	FPM	Terpolymer
Colour			Black
Hardness: (°IRHD)	D1415	ISO48	58
Tensile Strength (MPa)	D412	ISO37	10
Elongation at break (%)	D412	ISO37	210
Compression Set: 24 hrs @ 200°C (392°F)	D395	ISO815	17.5%
Minimum Operating Temperature			-51°C (-60°F)
Maximum Operating Temperature			+225°C (+437°F)
Heat Ageing: 72 hrs @ 250°C (482°F)	D573	ISO188	
Hardness change (points)	D1415	ISO48	5 _{RHD}
Tensile strength change	D412	ISO37	+10%
Elongation at break change	D412	ISO37	-1.5%
Low temperature glass transition (T _g)			-40°C

SPECIAL NOTE: This information is to the best of our knowledge accurate and reliable. However, PPE Ltd makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use, especially in applications where their failure may result in injury and/or damage. It should also be noted that all elastomeric parts have a finite life, therefore a regular program of inspection and replacement is strongly recommended. Low temperature operating parameters are based on SAE AMS 7379-2008. The material properties above should not be used for specification purposes.

Quotation's and Order's you can send to: sales@oring.su

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