

V75W

Food grade fluoroelastomer



Description

V75W is a copolymer FKM elastomer material suitable for repeated use in equipment associated with the production of dry, aqueous and fatty foodstuffs intended for human consumption.

Formulated using only those ingredients determined by the United States Federal Food and Drug Administration (FDA), V75W has undergone extraction testing in accordance with Code of Federal Regulations Title 21 (CFR21), Section 177.2600.

V75W also complies with the requirements of USP 25, NF20, 2002, Class 6 and has been tested in accordance with 3-A Sanitary Standards 18-03 Class 1.

Key Attributes

- ▶ Low compression set provides long-term sealing performance.
- ▶ Excellent resistance to oils, fuels and hydraulic fluids.
- ▶ FDA compliant - extraction tested to CFR 21 § 177.2600(e,f)
- ▶ USP Class VI <88> and USP <87> compliant
- ▶ 3-A Sanitary Standards 18-03 Class 1 compliant
- ▶ Free from Animal Derived Ingredients (ADI-free)

Typical Applications

- ▶ Pharmaceutical and bio-analytical equipment
- ▶ Food processing equipment
- ▶ Industrial applications (eg. paint spray and printing)

Other Materials Available

V77W anti-friction food grade FKM

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

Perlast® is a registered trademark of Precision Polymer Engineering Limited

FDA Regulation Extraction Test Results

Media	Time	Authorised limits (mg/sq.inch)	Result
Distilled water	First 7 hours	20	1.2, 1.2
	2 succeeding hours	1	<0.1, <0.1
n-Hexane	First 7 hours	175	<0.1, <0.1
	2 succeeding hours	4	<0.1, <0.1



Typical Material Properties

Property	ASTM	ISO	Value
Material Type	FKM	FPM	Copolymer
Colour			Off-white
Hardness: (°IRHD)	D1415	ISO48	75
Tensile Strength (MPa)	D412	ISO37	10
Elongation at break (%)	D412	ISO37	200
Compression Set: 22 hrs @ 200°C (392°F)	D395	ISO815	14%
Minimum Operating Temperature			-20°C (-4°F)
Maximum Operating Temperature			+200°C (+392°F)
Heat Ageing: 72 hrs @ 250°C (482°F)	D573	ISO188	
Hardness change (points)	D1415	ISO48	+10 IRHD
Tensile strength change	D412	ISO37	-25%
Elongation at break change	D412	ISO37	-25%

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. In non-black grades of elastomer, it is possible to observe slight variations in colour. This is normal and is inherent in the part; it is not indicative of foreign matter. These colour variations are not expected to adversely affect the performance of the part.
The material properties above should not to be used for specification purposes.