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Material Data Sheet	Code	V77W	Issue 2, Revision 4	ORING
	Designation	FKM / FPM	August 2003	

MATERIAL TYPE: Off-white Fluoroelastomer Rubber, 70-80 °IRHD.
Copolymer of vinylidene fluoride and hexafluoropropylene. With additional anti friction agents.
Formulated using only those ingredients determined by the United States Food and Drug Administration (FDA) Water and n-Hexane extraction tested in accordance with Code of Federal Regulations Title 21 (CFR21), Section 177.2600. Also complies to the requirements of USP 25, NF20, 2002, Class 6.

APPLICATION: Excellent resistance to oils, fuels and hydraulic fluids at high temperature.

TEMPERATURE RANGE: Maximum operating temperature +200°C (392°F).
Minimum operating temperature -20°C (-4°F).

SHELF LIFE CLASSIFICATIONS: Initial storage = 10 years, extended storage = 5 years.

TYPICAL PHYSICAL PROPERTIES:

Property	Unit	Test method	Value
Hardness (points)	°IRHD	ASTM D1415 (=ISO 48)	73
Tensile strength	Mpa	ASTM D412 (=ISO 37)	9.0
Elongation at break	%	ASTM D412 (=ISO 37)	220
Compression Set, Method B;			
22 hours at 200°C (392°F)	%	ASTM D395 (=ISO 815)	17
Heat Resistance;			
72 hours at 250°C (482°F)		ASTM 573 (=ISO 188)	
Hardness change (points)	°IRHD	ASTM D1415 (=ISO 48)	+8
Tensile strength change	%	ASTM D412 (=ISO 37)	-20
Elongation at break change	%	ASTM D412 (=ISO 37)	-20

FDA Regulation Extraction test		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

COSHH HEALTH AND SAFETY DATA: No known hazard exists if used in accordance with the temperature range as quoted.

FIRE HAZARD: Ignition temperature >315°C (599°F). Thermal decomposition will generate; hydrogen fluoride, fluorinated hydrocarbons, carbon monoxide and carbonyl fluoride. In the event of fire, fire-fighters must wear self-contained breathing apparatus and a protective suit. Extinguish with water, foam, carbon dioxide or dry chemical. Neutralise any refuse from a fire involving fluoroelastomer with calcium hydroxide solution and wear Neoprene® gloves before handling.

DISPOSAL: Must conform to national, state and/or local regulations. Landfill is recommended. Burning is not recommended, unless conducted by an approved/licensed incineration agency.

SPECIAL NOTE: This information is to the best of our knowledge accurate to the date indicated. However, PPE make 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.