Product Data Sheet

V76F

Chemically resistant ‘new generation’ lead-free fluoroelastomer

Description

V76F is a peroxide-cured tetrapolymer (70% fluorine) formulated for high performance sealing applications in today’s aggressive industrial environments.

V76F has been developed to provide outstanding resistance to solvents, fuels, hot water and steam (above 150°C/302°F).

V76F also offers superior resistance to acids, oils, coolants and hydraulic fluids, making it ideal for use in fuel systems, chemical processing equipment and certain critical diesel engine locations.

Alternative to lead-containing (litharge-cured) steam resistant grades.

Key Attributes

- Excellent resistance to fuels and solvents
- Excellent resistance to oils, steam/water and hydraulic fluids
- High temperature performance
- Superior long-term sealing performance

Typical Applications

- Marine diesel engines (e.g. fuel systems, cooling ports)
- Biofuel processing equipment
- Heat exchangers
- Paper/pulp processing equipment
- Hot water/steam systems

Other steam resistant elastomers

V75J (FKM) peroxide-cured, lead-free terpolymer
V88F (FKM) anti-friction tetrapolymer
A75H (FEPM) Aflas® material
E70K (EPDM) peroxide-cured material
Perlast® G80A (FFKM) perfluoroelastomer

Comparative data

Test conditions: 40°C; B50 Low emission automotive diesel fuel incorporating up to 50% FAME (fatty acid methyl ester)

Critical Material Properties	HNBR	FFKM	V76F
Hardness change after 266 days	-17	-1	-4
Volume change after 266 days	+14.31%	<1%	<1%

Typical Material Properties

Property	ASTM	ISO	Value
Material Type	FKM	FPM	Tetrapolymer
Colour			Black
Hardness: (°IRHD)	D1415	ISO48	71
Tensile Strength (MPa)	D412	ISO37	27.4
Elongation at break (%)	D412	ISO37	210
Compression Set: 72 hrs @ 200°C (392°F)	D395	ISO815	12.1%
Minimum Operating Temperature			-15°C (+5°F)
Maximum Operating Temperature			+250°C (+482°F)
Heat Resistance: 72 hrs @ 200°C (392°F) Hardness change (points) Tensile strength change Elongation at break change	 D1415 D412 D412	 ISO188 ISO48 ISO37	 3 IRHD +3% -15%