

KR370

Raw gum Terpolymer

TECHNICAL DATA SHEET

TECHNICAL INFORMATION

FLUONOX[®] KR370 is a high viscosity terpolymer consisting of VDF, HFP and TFE with 68% Fluorine content. It does not contain curatives; It can be cured with diamine or bisphenol AF curing systems. FLUONOX[®] KR370 is suitable for applications which need improved chemical resistance and long-term heat resistance compared to fluoroelastomer copolymer. This grade is designed for compression molding of shaft seals, valve stem seals, O-rings, bonded seals and gaskets.

PRODUCT FEATURES

- Good compression set
- Outstanding mould release
- No mould fouling

TYPICAL PROPERTIES

Properties	Test Method	Unit	Nominal Value
Appearance	-	-	Translucent, off white slab
Specific gravity at 23°C (73°F)	ASTM D792	gm/cm ³	1.87
Mooney viscosity ML (1+10)' at 121°C (250°F)	ASTM D1646	MU	70
Solubility	-	-	Dissolves in ketone and esters
Shelf stability at room temp.	-	-	Excellent
Fluorine content	Internal NMR method	%	68.0

Note: These are typical properties and not to be used for specification purposes.

PACKAGING

FLUONOX[®] KR370 is available in 25kg box.

FLUONOX® KR370

STANDARD FORMULATION OF COMPOUND

Formulation	Value		
FLUONOX® KR370	100		
Bisphenol AF	2.0 phr		GFL
BTPPC	0.5 phr		GFL
N-990 carbon black	30 phr	Thermax N-990	Cancarb Ltd.
Magnesium oxide	3 phr	Kyowamag 150	Kyowa Chemical Industry Co. Ltd.
Calcium hydroxide	6 phr	OMM-2	Ohmi Kagaku Kogyo Co., Ltd

MDR 6min at 177°C (351°F), arc 0.5°

Properties	Test Method	Unit	Value
ML	ASTM D6601	lbf x in	1.65
MH	ASTM D6601	lbf x in	19.0
ts2	ASTM D6601	min	2.5
tc50	ASTM D6601	min	3.3
tc90	ASTM D6601	min	4.5

PHYSICAL PROPERTIES

Press cure 10 min at 170°C (338°F); Post cure 24 hours at 230°C (446°F)

Properties	Test Method	Unit	Value
100% Modulus	ASTM D412	MPa (psi)	5.0 (725)
Tensile strength	ASTM D412	MPa (psi)	14.0 (2030)
Elongation at break	ASTM D412	%	230
Shore A Hardness	ASTM D2240	Points	74

Compression Set: 70 hours at 200°C (392°F)

Properties	Test Method	Unit	Value
Compression set	ASTM D395 Method B	%	25

Note: The values of properties mentioned in the technical data sheet are tested with proprietary materials listed above. Equivalent chemicals can also be used, however under such a case; there may be a little variation in the value of properties.

FLUONOX® KR370

SAFETY AND HANDLING

Handling and processing of fluoroelastomer must be done in ventilated areas to prevent personnel exposure to the fumes liberated during curing or use of cured rubber at high temperatures. During the process, some fumes may generate at high temperatures which are harmful to human beings. Fumes should not be inhaled; eye and skin contact must be avoided. In case of skin contact flush skin with cold water immediately. In case of eye contact, flush with water immediately and seek medical help. Smoking tobacco or cigarettes should not be allowed in the working area. Mixing agents that contain metallic particulate such as powdered Aluminium can rapidly decompose at high temperatures; therefore do not use metallic particulate as a mixing agent. Fluoroelastomer should be stored away from heat. It should be kept in a clean and dry area where it can be protected until it is used. Please read the Material Safety Data Sheet before handling the product.

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WARNING: Do not use any of FLUONOX® Fluoroelastomer in medical devices that are designed for permanent implantation in the human body. For other medical uses, prior permission of GFL may be sought.

SALES AND TECHNICAL SUPPORT

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