FLUONOX®
Fluoroelastomer

GFL™
GUJARAT FLUOROCHEMICALS
VALUE THROUGH GREEN CHEMISTRY

KR235
Raw Copolymer

TECHNICAL DATA SHEET

TECHNICAL INFORMATION

FLUONOX® KR235 is a medium-low viscosity copolymer consisting of VDF and HFP. FLUONOX® KR235 is a general-purpose FKM. It does not contain curatives; it can be cured with a diamine or bisphenol AF curing system. It can be used for injection, transfer or compression moulding, extrusion and calendering or can be dissolved in polar solvents for coating applications. It can also be used in the blend to modify other Fluonox cure incorporated grades.

PRODUCT FEATURES

- Good compression set resistance
- Excellent mould release
- Good extrusion behavior
- Good flow behavior

TYPICAL PROPERTIES

Properties	Test Method	Unit	Nominal Value
Appearance	-	-	Translucent
Specific gravity at 23°C (73°F)	ASTM D792	gm/cm^3	1.81
Mooney viscosity ML (1+10)' at 121°C (250°F)	ASTM D1646	MU	28
Solubility	-	-	Dissolves in ketone and esters
Shelf stability at room temp.	-	-	Excellent
Fluorine content	Internal NMR method	%	66.0

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

PACKAGING

FLUONOX® KR235 is available in 25kg box.

FLUONOX® KR235

STANDARD FORMULATION OF COMPOUND

Formulation	Value		
FLUONOX® KR235	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	0.7
MH	ASTM D6601	lbf x in	21.1
ts2	ASTM D6601	min	1.7
tc50	ASTM D6601	min	2.2
tc90	ASTM D6601	min	3.5

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)	6.7 (972)
Tensile strength	ASTM D412	MPa (psi)	14.0 (2030)
Elongation at break	ASTM D412	%	200
Shore A Hardness	ASTM D2240	Points	76

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

Properties	Test Method	Unit	Value
Compression set	ASTM D395 Method B	%	17

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® KR235

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.

SALES AND TECHNICAL SUPPORT

Corporate & Marketing Headquarter
Gujarat Fluorochemicals Limited
INOX Towers, 17 , Sector-16A,
Noida - 201301 U.P., India
+91 120 6149600

Europe
Gujarat Fluorochemicals GmbH
Regus Center Watermark 14th Floor,
Überseeallee 10, 20457 Hamburg, Germany
+49 40 808074-667/668

Works
Gujarat Fluorochemicals Limited
12/A Dahej, GIDC, Industrial Estate,
Tehsil Vagra, Dist. Bharuch 392130, Gujarat, India
+91 2641 618003

Americas
GFL Americas, LLC
1212 Corporate Dr., Suite-540,
Irving, TX 75038, USA
+1 512 446 7700