

Technical Information

FLUONOX™ KR325 is a medium low viscosity terpolymer consisting of VDF, HFP and TFE. FLUONOX™ KR325 can be used for compression, injection and extrusion molding of shaft seals, orings and gaskets. It does not contain curatives; it can be cured with diamine cure system/bisphenol cure system.

Product features

- ◆ Excellent compression set
- ◆ Good mould release
- ◆ No mould fouling
- ◆ Good extrusion behavior
- ◆ Good chemical resistance

Properties

Properties	Value	Unit	Method
Appearance	Translucent		
Specific gravity at 23°C (73°F)	1.85	gm/cm ³	ASTM D792
Mooney viscosity (ML1+10) at 121°C (250°F)	25	MU	ASTM D1646
Solubility	Dissolves in ketone and esters		
Shelf stability at Room temp	Excellent		
Fluorine content	68	%	Internal NMR Method

Note-These are typical properties and not to be used for specification purpose

Packaging

FLUONOX™ KR325 is available in 25 Kg corrugated box.

Standard formulation of Compound

Formulation	Value		
FLUONOX™ KR325	100 Parts		
Fluonocure™ #1	4.2 Parts		
N-990 carbon black	30 Parts	Thermax N-990	CANCARB Ltd.
Magnesium Oxide	3 Parts	Kyowamag 150	Kyowa Chemical Industry Co.Ltd.
Calcium hydroxide	6 Parts	OMM-2	Ohmi Kagaku Kogyo Co.,Ltd.

MDR 6min at 177 °C (351°F), arc 0.5°

Properties	Value	Unit	Method
ML	0.5	Lbf.in	ASTM D6601
MH	10.35	Lbf.in	
Ts2	2.57	Min	
Tc50	3.01	Min	
Tc90	4.42	Min	

Mooney Viscosity of full compound

Properties	Value	Unit	Method
Mooney viscosity (ML1+10') at 121°C (250°F)	54	MU	ASTM D1646

Physical Properties:

Press cure 10 min at 170 °C (338°F)

Post cure 24 hours at 230°C (446 °F)

Properties	Value	Unit	Method
100% Modulus	4.4(638)	MPa (psi)	ASTM D412
Tensile strength	12 (1740)	MPa (psi)	
Elongation at break	250	%	
Hardness	75	Shore A	ASTM D2240

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

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

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

Safety and Handling

Handling and processing of fluoroelastomer must be done in ventilated areas to prevent personnel exposure to the fumes liberated during cure or use of cured rubber at high temperature. During the process, some fumes may generate at high temperature which are harmful for 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 working area. Mixing agents that contain metallic particulate such as powdered aluminum can rapidly decompose at high temperature; therefore do not use metallic particulate as mixing agent. Fluoroelastomer should be stored away from heat. It should be kept in clean and dry area where it can be protected until it is used. Please read the Material Safety Data Sheet before handling the product.

Disclaimer

FLUONOX™ is the brand name of Gujarat Fluorochemicals Limited (GFL) used for its brand of fluoroelastomer. FLUONOX™ can be used in applications duly approved by GFL. Customers who plan to use the word FLUONOX™ as the trade mark on or relation to their own fluoroelastomer parts and other products in any style or combination or in any manner whatsoever must contact GFL for prior permission for such use. No consumer/user of GFL fluoropolymer resin is permitted to claim that their products contain FLUONOX™ without prior permission from GFL.

The information provided in the bulletin is furnished at no cost to the recipient and is based on information and technical data that Gujarat Fluorochemicals Limited believes is correct and sound. Those who choose to use the information must be technically qualified, and do so entirely at their own cost and risk. The users must determine and insure that their specific conditions of processing present no health or safety hazards. GFL does not warranty, either expressly or impliedly in respect of use of this information for application of its FLUONOX™ branded Fluoroelastomer and shall bear no liability as a result of any loss or damage caused directly or indirectly due to use of any information provided in this bulletin. Nothing contained herein can be taken or construed as a grant of license by GFL to operate under or a recommendation to infringe any patents.

Note 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.

For more information, please contact Gujarat Fluorochemicals Limited

Corporate & Marketing Office :

INOX Towers, Plot No.17, Sector 16A
Noida-202301, U.P., INDIA
Tel : +91-120-6149600
Fax : +91-120-6149610

Works :

12/A, GIDC Dahej Industrial Estate, Tehsil
Vagra, Distt. Bharuch-392230, Gujarat, INDIA
Website : www.gfl.co.in
Email : contact@gfl.co.in

