FLUONOX™
Fluoroelastomer

KB2452

Cure incorporated copolymer

Technical Information

FLUONOX™ KB2452 is a fluoroelastomer which consist of HFP and VDF. FLUONOX™ KB2452 is Bisphenol AF cure incorporated medium viscosity fluoroelastomer. It is suitable for compression moulding. FLUONOX™ KB2452 grade is an excellent choice for gaskets and O rings.

Product features

- Excellent compression set resistance
- Excellent scorch safety
- Better mould release
- No mould fouling
- Excellent hot tear resistance

Properties

Properties	Value	Unit	Method
Appearance	Off white slab		
Specific gravity at 23°C (73°F)	1.81	gm/cm^3	ASTM D792
Mooney viscosity (ML1+10) at 121°C (250°F)	45	MU	ASTM D1646
Solubility	Dissolves in ketone and esters		
Shelf stability at Room temp	Excellent		
Fluorine content	66	%	Internal NMR Method

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

Packaging

FLUONOX™ KB2452 is available in 25 Kg corrugated box.

Standard formulation of Compound

Formulation	Value		
FLUONOX™ KB2452	100 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 6 min at 177°C (351°F) arc 0.5°

Properties	Value	Unit	Method
ML	1.6	Lbf.in	ASTM D6601
MH	16	Lbf.in	
Ts2	1.50	Min	
Tc50	2.30	Min	
Tc90	3.50	Min	

Mooney Viscosity of Full Compound

Properties	Value	Unit	Method
Mooney viscosity (ML1+10') at 121°C(250°F)	100	MU	ASTM D1646

Physical Properties:

Press cure 10 min at 170 °C (338°F)

Post cure 24 hours at 230℃ (446°F)

Properties	Value	Unit	Method
100% Modulus	5.9 (856)	MPa(psi)	ASTM D412
Tensile strength	14 (2031)	MPa(psi)	
Elongation at break	250	%	
Hardness	74	Shore A	ASTM D2240

Heat resistance: 70 hours at 250 °C (482°F)

Properties	Value	Unit	Method
Change in tensile strength	-6	%	ASTM D573
Change in elongation	+1	%	
Hardness change	0	Shore A	

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

Properties	Value	Unit	Method
Compression set	17	%	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 curing 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

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Note warning

Do not use any of FLUONOX^{TM} 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

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