

# KB2252Z

Cure incorporated copolymer

#### **Technical Information**

FLUONOX<sup>TM</sup> KB2252Z is a fluoroelastomer which consist of HFP and VDF. FLUONOX<sup>TM</sup> KB2252Z is cure incorporated (Bisphenol AF) medium-low viscosity fluoroelastomer. This grade is specially designed for application where improved metal bonding adhesion is required, it is suitable compression moulding, transfer moulding, extrusion moulding, injection moulding and calendaring. FLUONOX<sup>TM</sup> KB2252Z grade is an excellent choice for making bonded seals, gaskets, hoses and tubes

#### **Product features**

- Incorporated metal adhesion promoter
- Excellent bonding to metal
- Superior mould flow
- Better mould release
- Lack of mould fouling
- Good hot tear resistance
- Better scorch resistance

### **Properties**

Properties	Value	Unit	Method
Appearance	Off white slab		
Specific gravity at 23°C (73°F)	1.81	gm/cm <sup>3</sup>	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	66	%	Internal NMR Method

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

### **Packaging**

FLUONOX KB2252Z is available in 25 Kg corrugated box.

# **Standard formulation of Compound**

Formulation	Value		
FLUONOX <sup>™</sup> KB2252Z	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	0.7	Lbf.in	ASTM D6601
MH	13.4	Lbf.in	
Ts2	1.6	Min	
Tc50	2.2	Min	
Tc90	3.7	Min	

# **Mooney Viscosity of Full Compound**

Properties	Value	Unit	Method
Mooney viscosity (ML1+10') at 121°C (250°F)	64	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	5.2 (754)	MPa (psi)	ASTM D412
Tensile strength	14 (2031)	MPa (psi)	
Elongation at break	240	%	
Hardness	74	Shore A	ASTM D2240

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

Properties	Value	Unit	Method
Change in tensile strength	-10	%	ASTM D573
Change in elongation	+2	%	
Hardness change	+/-0	Shore A	

## 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 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<sup>TM</sup> 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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