XNBR（NIPOL CARBOXY LATED NITRILE ）

Carboxylated nitrile rubber is formed by terpolymerization of butadiene, acrylonitrile and organic acid (acrylic acid, methacrylic acid, etc.).

About XNBR

The introduction of carboxyl groups into XNBR increases the polarity, increases the compatibility of NBR with PVC and phenolic resin, imparts high strength, has good adhesion and aging resistance, improves wear resistance and tear strength, and further improves oil resistance.

XNBR Application

Carboxylated nitrile rubber is mainly used in hoses, tapes, seals, special products for oil wells, reciprocating oil seals, and sealing rings. Various molded products for gaskets, oil seals, O-rings, leather knots, rubber rollers, shoe soles, and heels. Adhesive and epoxy resin modification special.

Technical Data sheet of XNBR

Example：Formulation ： Nipol® 1472 (or Chemigum® NX 775)

physical properties	Nominal Value (Metric)	Nominal Value (Metric)	Test Methods
Viscosity Measurement	>= 1.4 @Temperature 180°C	>= 1.4 @Temperature 356°F	Rheometer, t_{10}
	>= 3.8 @Temperature 180°C	>= 3.8 @Temperature 356°F	Rheometer, t_{90}
Mooney viscosity	56 @Temperature 100°C	56 @Temperature 212°F	ML (1 + 4)
physical properties	Nominal Value (Metric)	Nominal Value (Metric)	Test Methods
Shore Hardness (Shore A)	75	75	
	70 @Temperature 75.0°C	70 @Temperature 167°F	
Tensile Strength (Break)	11.7 MPa	1700 psi	
Elongation (Break)	314 %	314 %	
100% modulus	0.00640 GPa	0.928 ksi	
200% modulus	0.00990 GPa	1.44 ksi	
Rebound	27 %	27 %	23°C
tear strength	28.0 kN/m	160 pli	Tear Propagation Resistance (Ring)
permanent compression	8.0 %	8.0 %	22 hr;70°C