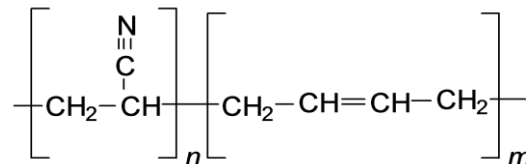


Hydrogenated Acrylonitrile Butadiene Elastomer (HNBR)



SPECIFICATIONS

Property	Spec	Value
Hardness Shore A	ISO 868	90±5
Modulus 100%	DIN 53 504	≥6 MPa
Tensile Strength	DIN 53 504	≥9MPa
Elongation at break	DIN 53 504	≥220%
Tear strength	DIN ISO 34-1	≥20 kN/m
Specific Gravity	ISO 1183	≥1450 kg/m ³
Rebound Elasticity	DIN 53 512	30%
Abrasion	DIN 53 516	130 mm ³
Compression Set, 24h, 70°C, 25% def	ISO 815	≤26%
Compression Set, 24h, 100°C, 25% def	ISO 815	≤32%
Min Service Temp		-20°C...-4°F
Max Service Temp		+150°C...+302°F
Temp. Max Water/Steam		+120°C...+248°F
Temp. Max Hot Air, short		+180°C...+356°F
Color		Black

DESCRIPTION

MN77 is HNBR material with hardness 90±5 Shore A. The first commercialization of hydrogenated nitrile rubber HNBR copolymer was in 1984, almost 50 years after the commercialization of NBR. To obtain HNBR, NBR is hydrogenated during the polymer synthesis process. Hydrogen is selectively added to the unsaturated carbon-carbon double bonds, of butadiene in the NBR polymer to form saturated carbon-carbon single bonds. Thus HNBR emphasizes two essential features: nitrile, functional groups as in NBR, and a hydrogenated backbone. The nitrile polar group is responsible for HNBR's excellent oil and fuel resistance. The hydrogenated backbone is responsible for HNBR's significantly increased high temperature properties compared to NBR. HNBR has very good ozone and weather resistance thanks to its saturated backbone.