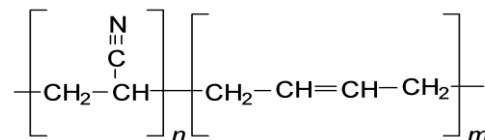


Highly Saturated Nitrile Butadiene Elastomer (HNBR)



SPECIFICATIONS

Property	Spec	Value
Hardness	DIN 53505	85± 5
Specific Gravity	DIN 53479	1.33 g/cm ³
Tensile Strength	DIN 53504	22 MPa
Elongation	DIN 53504	180%
Tearing	DIN53515	43N/mm
Compression Set: 22h at 150°C	DIN53517	≤22%
Module 100%	DIN53504	12MPa
Bending test (24H/-40°C)		No Cracks
Color		Black

Samples cured at 10 min, 170°C
Post-curing at 4 hours, 150°C

DESCRIPTION

MX01 is a HNBR material with hardness 85±5 Shore A, specially compounded for highly saturated applications. 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, -C=C-, of butadiene in the NBR polymer to form saturated carbon-carbon single bonds -C-C-. Thus HNBR emphasizes two essential features: nitrile, -C≡N, 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.