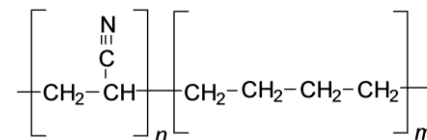


## Hydrogenated Acrylonitrile Butadiene Elastomer (HNBR)



### SPECIFICATIONS

Property	Spec	Value
Hardness	DIN 53505	85A
Density (g/cm <sup>3</sup> )	DIN 53479	1.33
Tensile Strength MPa	DIN 53504	22
Ultimate Elongation	DIN 53504	180 %
100% Modulus MPa	DIN 53504	12
Tear Strength (N/mm)	DIN 53515	43
Compression Set -150° C 22h	DIN 53517	14%
Color		Black

### DESCRIPTION

MN223 is a HNBR material with hardness 85 Shore A, specially compounded for standard 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.