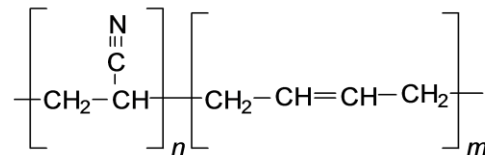


Hydrogenated Nitrile Butadiene Elastomer (HNBR)



SPECIFICATIONS

Property	Spec	Value
Hardness Shore A	ISO 7619	85±5
Density	DIN 53479	1.29 g/cm ³
Module 100%	DIN 53504 S2	12.3 N/mm ²
Module 200%		-
Module 300%		-
Tensile Strength	DIN 53504 S2	15 N/mm ²
Elongation break	DIN 53504 S2	150%
Tear strength	ISO 34-1 B	36 N/mm
Tear strength	ISO 34-1 A	4 N/mm
Rebound %	DIN 53512	-
Abrasion mm ³	ISO 4649	-
Brittleness point	ASTM D2137	-
TR-TEST TR10 TR-TEST	ASTM D1329	-41°C
TR-TEST TR30 TR-TEST	ASTM D1329	-29°C
TR-TEST TR50 TR-TEST	ASTM D1329	-23°C
Compression Set Deformation 25% Temperature 150°C 24hrs.	ISO 815-1 A	-
Ozone Test Time Hrs.	ISO 1431-1	-40 to 160°C
Operating Temperature		
Concentration pphm		
Elongation %		
Color		Black

DESCRIPTION

MN284 is a HNBR material with hardness 85 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, -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.