

HNBR

Hydrogenated Nitrile Butadiene Rubber

A synthetic polymer that results from the hydrogenation of Nitrile rubber (NBR). This gives it superior mechanical characteristics, particularly high strength, greater thermal stability and helps reduce extrusion and wear. It can be used where temperatures are too high for standard Nitrile (NBR), but not sufficiently high to use fluorocarbon rubber (FFKM).

Colour: Green

Operating temperature range: -20°C to 150°C

Physical Property	Test Method	Units	Typical Values
Hardness	ISO 48	IRHD	82
Tensile Strength	ISO 37	Mpa	15.6
Elongation	ISO 37	%	99
Modulus at 100%	ISO 37	Mpa	2.4
Specific Gravity	ISO 2781	g/cm3	1.28
Compression Set 24h / 150°C	ISO 815	%	17.5
Tear Resistance	ISO 34	N/mm	24.3

Aging Property	Test Method	Time (h)	Temperature (°C)	Hardness	Tensile Strength (%)	Ultimate Elongation (%)	Volume (%)
Air	ISO 188	336	150	3	-10.9	-6.1	
Water	ISO 1817	168	100	-5			3.7
ASTM Oil 901	ISO 1817	168	100	5			-1.6
ASTM Oil 903	ISO 1817	168	100	-18			21.1

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