

$$\begin{bmatrix} N \\ C \\ CH_2-CH \end{bmatrix}_n CH_2-CH=CH-CH_2$$

Acrylonitrile Butadiene Elastomer (NBR)

SPECIFICATIONS

Property	Spec	Value
Hardness	ISO 868	85A
Density (g/cm³)	ISO 1183	1.32
Tensile Strength (N/mm²)	DIN 53504	17
Ultimate Elongation	DIN 53504	150%
100% Modulus (N/mm²)	DIN 53504	11
Elasticity	DIN 53512	20%
Tear Strength (kN/m)	DIN 53515	9
Abrasion (mm³)	DIN 53516	130
Compression Set 70C 24 Hrs	ISO 815	<5%
Compression Set 100C 24hrs	ISO 815	<6%
Minimum Service Temp.		-35° C -31° F
Maximum Service Temp.		120° C 248° F
Color		Black

DESCRIPTION

MN01 is a NBR material with hardness 85 Shore A, specially compounded for standard grade applications. Nitrile elastomer NBR is an amorphous random copolymer of butadiene and acrylonitrile. There are numerous NBR copolymers available globally. As a thermoset elastomer, an NBR compound consists of NBR copolymer, carbon black reinforcement fillers, curing agents, molding process aids and specialty additives. NBR articles are molded by injection, transfer, compression or extrusion processes. NBR lends itself to a virtually infinite number of compounded materials and versatile in applications. The essential feature of NBR elastomer is the presence of Nitrile, -C?N, functional group. This polar group is responsible for its significantly increased chemical resistance.