

MN12

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

Low Temperature Acrylonitrile Butadiene Elastomer (NBR)

SPECIFICATIONS

Property	Spec	Value
Hardness	ISO 868	80A
Density (g/cm³)	ISO 1183	1.27
Tensile Strength (N/mm²)	DIN 53504	14
Ultimate Elongation	DIN 53504	140%
100% Modulus (N/mm²)	DIN 53504	9
Elasticity	DIN 53512	50%
Tear Strength (kN/m)	DIN ISO 34-1 Method B	15
Compression Set 70C 24 Hrs	ISO 815	<6%
Compression Set 100C 24hrs	ISO 815	<9%
Minimum Service Temp.		-50° C -58° F
Maximum Service Temp.		110° C 230° F
Color		Black

DESCRIPTION

MN12 is a NBR material with hardness 80 Shore A, specially compounded for low temperature 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.