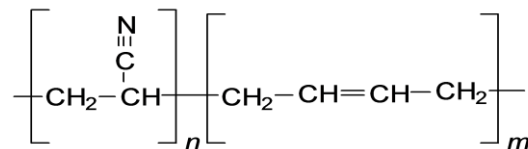


Acrylonitrile-Butadiene Elastomer (Ozone Resistant NBR)



TECHNICAL DATA

		Curing
SLAB 2 mm		20 min at 160°C
BUTTON 12.5 mm		40 min at 160°C
Original Parameters	Spec	Value
Hardness	ASTM D 2240	73 Shore A
Specific gravity	ASTM D 297	1.275 g/cm ³
Tensile strength	ASTM D 412/C	14.2 N/mm ² (MPa)
Elongation	ASTM D 412/C	294 %
Tear resistance	ASTM D 624/C	37 N/mm
Mod @ 100%	ASTM D 412/C	4.5 N/mm ² (MPa)
Abrasion resistance	ISO 4649-A	105 mm ³
Compression set:		
Initial 25% deformation		
After 22 hrs. at 100°C	ASTM D 395/B	9
Ozone test		
After 72 hrs. at 40°C –Ozone concentration 50 pphm, Elongation 20%, the samples under lens shows:		
	DIN ISO 1431-1	Stufe 0 No cracks
Low temperature resistance		
TR-TEST TR 10%	ASTM D 1329	-°C
TR-TEST TR 50%	ASTM D 1329	-°C
BRITTLENESS POINT	ASTM D 2137	-26°C

DESCRIPTION

MN153 is a NBR material with hardness 73 Shore A. 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. This polar group is responsible for its significantly increased chemical resistance.

Physical and Mechanical Properties after aging

Environment	AIR	IRM 903 OIL
Test Method	ASTM D 573	ASTM D 471
Time Hrs.	70	70
Temperature (°C)	100	100
Δ Hardness (ShA)	+7	-
Δ Tensile strength (%)	+8	-
Δ Elongation (%)	-20	-
Δ Volume (%)	-4	+2
Δ Weight (%)	-3	+1.5