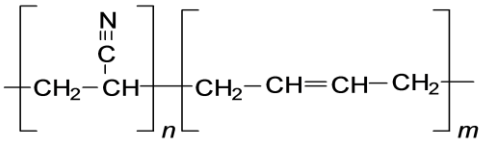
systemseals

MATERIAL SPECIFICATION SHEET

MN323

Nitrile Butadiene Elastomer (NBR)



SPECIFICATIONS

Property	Spec	Value
Physical Properties – BF714		
Hardness Shore A	D2240	70 ± 5
Tensile Strength	D412 Die C	14 min. MPa
Elongation	D412 Die C	250 min. %
Specific Gravity	D1817	-
Heat Resistance – (100°C x 70 hrs) BF Basic Requirements	D573	
Hardness Change		+5 points
Tensile Strength Change		+14 %
Elongation Change		-12 %
Volume Change		-3 %
Compression Set – (100°C x 22 hrs) B14	D395B	8 %
IRM 901 Oil – (100°C x 70 hrs) – EO14	D471	
Hardness Change		-1 points
Tensile Strength Change		+13 %
Elongation Change		-3 %
Volume Change		-1 %
IRM 903 Oil – (100°C x 70 hrs) – EO34	D471	
Hardness Change		-18 points
Tensile Strength Change		-7 %
Elongation Change		-12 %
Volume Change		+38 %
Low-temperature resistance – (-55°C x 3 min) – F19	D2137	Non brittle
Color		Black

DESCRIPTION

MN323 is a NBR material with hardness 70±5 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.