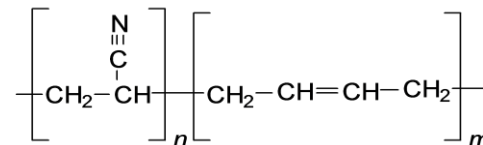


Low Temperature Acrylonitrile Butadiene Elastomer (NBR)



SPECIFICATIONS

Property	Requirement	Value
Press cure @ 170°C x 10 min Post cure @ 120°C x 1 hr.		
Hardness, Shore A	70±5	73
Tensile Strength, MPa	10	15.2
Elongation %	250	277
Specific Gravity		1.209
Heat aging @ 100°C x 70 hrs. Hardness change, points Tensile Change % Elongation Change %	+15 -20 -40	+8 -3 -21
Compression Set Curing conditions Press cure @ 170°C x 12 min Post cure @ 120°C x 1hr Heat aging @ 100°C x 22 hrs. %	25	9
ASTM No. 1 Oil Immersion @ 100°C x 70 hrs. Hardness change, points Tensile Change % Elongation Change % Volume Change %	-5~+15 -25 -45 -10~+5	+4 +7 -15 -3
ASTM IRM 903 Oil Immersion @ 100°C x 70 hrs. Hardness Change, points Tensile Change % Elongation Change % Volume Change %	0~-15 -45 -45 0~+35	-15 -21 +1 +25
Low Temperature Brittleness Tests after 3 min. @ -55°C		NON BRITTLE

DESCRIPTION

MN14 is a NBR material with hardness 70 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. This polar group is responsible for its significantly increased chemical resistance.

The compound MN14 can meet ASTM D2000 M5BG710 A14 B14 E014 E034 F19.