



World Class Sealing Solutions

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TA1290

90 Duro HNBR Hydrogenated Nitrile Compound

HNBR (Sometimes referred to as Highly Saturated Nitrile – HSN) offers a broad temperature range from -30° F to + 320° F (350° in Oil). HNBR has very good heat resistance, high strength and excellent resistance to oxidized fuels and sour crude. Therefore, HSN should be considered for applications generally too severe for standard nitriles (such as temperatures above 250°F, oxidized fuel and oils with corrosion inhibitors).

ASTM Designation	ORIGINAL PROPERTIES	ASTMD2000 Specification	Typical Values
	Durometer, Shore A	90 +/-5	88
	Tensile, psi (MPa), Minimum	2900 (20)	3440 (24)
	Elongation, % Minimum	150	178
	Specific Gravity	-	1.30
	Modulus at 100%, psi	-	2044
A26	<u>HEAT AGE, 70 HRS @ 150C</u>		
	Durometer Change, Points	+10	+5
	Tensile Strength Change, % Maximum	-15	+15
	Elongation Change, % Maximum	-25	-22
B36	<u>COMPRESSION SET, 22 HRS @ 150C</u>		
	Original Deflection, % Maximum	35 (Plied)	23
E016	<u>ASTM #1 OIL, 70 HRS @ 150C</u>		
	Durometer Change, Points	-5/+10	+4
	Tensile Change, % Maximum	-20	-9
	Elongation Change, % Maximum	-30	-19
	Volume Change, %	-10/+5	-3
E036	<u>ASTM #3 (IRM 903) OIL, 70 HRS @ 150C</u>		
	Durometer Change Points	-15	-5
	Tensile Change, % Maximum	-40	-6
	Elongation Change, % Maximum	-30	-11
	Volume Change, % Maximum	+25	+9
Z1	<u>Low Temperature Retraction Test</u>		
	TR10, °C		-26
Z2	<u>Torsion Modulus Test</u>		
	T100, °C		-45

SPECIFICATIONS MET

ASTM D2000-01 Grade M4DH920 A26 B36 E016 E036 Z1 Z2