

Mykin Inc

RN00390 NITRILE COMPOUND

GENERAL PROPERTIES

Mykin Inc's RN00390 Nitrile (BUNA-N) is a general purpose copolymer of butadiene and acrylonitrile. This compound has a relatively high acrylo content, making it exceptionally resistant to petroleum base oils and hydrocarbon fuels over a temperature range of -40F to +250F. Nitrile has good mechanical properties when compared with other elastomers and high wear resistance. Unless they are specially compounded, nitrile is not resistant to weathering, sunlight and ozone.

ASTM Designation	ORIGINAL PROPERTIES	ASTM D2000 SPECIFICATION
	Durometer, Shore A	90+/-5
	Tensile, psi (MPa), Minimum	1450 (10)
	Elongation, % Minimum	100
	Specific Gravity	-
	HEAT AGE, 70 HRS @ 100 C	
	Durometer Change, Points	+/- 15
	Tensile Strength Change, % Maximum	+/- 30
	Elongation Change, % Maximum	-50
B14	COMPRESSION SET, 22 HRS @ 100 C Original Deflection, % Maximum	25 (Button)
EA14	WATER RESISTANCE, 70 HRS @ 100C Durometer Change, Points Volume Change, %	+/-10 +/-15
EF11	FUEL A RESISTANCE, 70 HRS @ 23C Durometer Change, Points Tensile Change, % Maximum Elongation Change, % Maximum Volume Change, %	+/-10 -25 -25 -5/+10
EF21	FUEL B RESISTANCE, 70 HRS @ 23C Durometer Change, Points Tensile Change, % Maximum Elongation Change, % Maximum Volume Change, % Maximum	0/-30 -60 -60 0/+40
EO14	ASTM #1 OIL, 70 HRS @ 100C Durometer Change, Points Tensile Change, % Maximum Elongation Change, % Maximum Volume Change, %	-5/+15 -25 -45 -10/+5
EO34	ASTM #3 OIL, 70 HRS @ 100C Durometer Change, Points Tensile Change, % Maximum Elongation Change, % Maximum Volume Change, % Maximum	-10/+5 -45 -45 0/+25
F16	LOW TEMPERATURE BRITTLINESS ASTM D2137, Method A, 9.3.2 3 Minutes @ -35 C	Non-Brittle

SPECIFICATIONS MET

ASTM D2000-01 Grade M7BG910 B14 EA14 EF11 EF21 EO14 EO34 F16

ASTM D2000-75 Grade 7BG915 B14 E14 E34 E51 E61 F16 L14