



SPEC SEALS TECHNICAL REPORT N168-70 FDA NITRILE COMPOUND

GENERAL PROPERTIES

SPEC SEALS' N168-70 Nitrile (BUNA-N) is a copolymer of butadiene and acrylonitrile. This compound is a special Black Color FDA Grade Nitrile (BUNA-N) that is acceptable for use over a temperature range of -40F to +250F. The ingredients in SPEC SEALS' N168-70 are listed in the U.S. Code of Federal Regulations (21 CFR 177.2600) as being acceptable for repeated use in contact with food. This compound meets the following popular ASTM Specifications.

		SPEC SEALS N168-70	
<u>ASTM Designation</u>	<u>ORIGINAL PROPERTIES</u>	<u>ASTM D2000 SPECIFICATION</u>	<u>LABORATORY PROPERTY</u>
	Durometer, Shore A	70 +/- 5	72
	Tensile, psi (MPa), Minimum	2031 (14)	2420 (17)
	Elongation, % Minimum	250	310
	Specific Gravity	-	1.24
	<u>HEAT AGE, 70 HRS @ 100 C</u>		
	Durometer Change, Points	+/-15	+3
	Tensile Strength Change, % Maximum	+/-30	+7
	Elongation Change, % Maximum	-50	-21
B14	<u>COMPRESSION SET, 22 HRS @ 100 C</u>		
	Original Deflection, % Maximum	25	18
EA14	<u>WATER RESISTANCE, 70 HRS @ 100C</u>		
	Durometer Change, Points	+/-10	+2
	Volume Change, %	+/-15	+6.2
Z1	<u>LOW TEMPERATURE RETRACTION</u>		
	TR10, Degrees C	-	-30.5

SPECIFICATIONS MET

ASTM D2000-99 Grade M2BG714 B14 EA14 F17

Z1=TR10=-30.5C

Z2=Meets FDA CFR 177.2600

MANUFACTURER'S CROSS REFERENCE

N168-70 is designed to meet or exceed the properties of these popular Nitrile Compounds: N1069-70, N508-75, 7077, C22-70, 2068-70, H14100 and 275B.