

**NBR (NITRILE) – BLACK
90 SHORE HARDNESS
TECHNICAL DATASHEET**

CURE SYSTEM: SULPHUR

Temperature Range: -30° C to +100° C

Specification Met:

ASTM 2000 M7BG910 A14 B14 EA14 EO14 EO34

PHYSICAL PROPERTIES

PARAMETERS	REQUIREMENT ASTM D2000	ISG TEST VALUE
Hardness, Shore A (ASTM D 2240)	90 ± 5	89
Tensile Strength, Mpa (ASTM D412)	Min 10.0	16.0
Elongation At Break, % (ASTM D 412)	Min 100	185
Specific Gravity, g/cm3 (ASTM D 297)	--	1.27g/cm3

RESISTANCE TO HEAT -- ASTM D 573 (70 Hrs At 100°C) – A14	REQUIREMENT ASTM D2000	ISG TEST VALUE
Hardness Change, Points	±15	+5
Tensile Strength Change %	± 30	+6
Elongation Change %	Max -50	-30

COMPRESSION SET -- ASTM D395 – B14	REQUIREMENT ASTM D2000	ISG TEST VALUE
Compression Set % 22hrs @ 100°C	Max 25	14%

RESISTANCE TO WATER -- ASTM D 471 (70 Hrs At 100°C) – EA14	REQUIREMENT ASTM D2000	ISG TEST VALUE
Hardness Change, Points	±10	-6
Volume Change %	± 15	+8

RESISTANCE TO OIL 901 -- ASTM D 471 (70 Hrs At 100°C) – EO14	REQUIREMENT ASTM D2000	ISG TEST VALUE
Hardness Change, Points	-5 To +10	+4
Tensile Strength Change %	Max -25	+10
Elongation Change %	Max -45	-25
Volume Change %	-10 To +5	-5

RESISTANCE TO OIL 903 -- ASTM D 471 (70 Hrs At 100°C) – EO34	REQUIREMENT ASTM D2000	ISG TEST VALUE
Hardness Change, Points	-10 To +5	+5
Tensile Strength Change %	Max -45	-10
Elongation Change %	Max -45	-15
Volume Change %	-10 To +25	+8

LOW TEMP RESISTANCE -- ASTM D 2137 – F17	REQUIREMENT ASTM D2000	ISG TEST VALUE
Non-Brittle After 3Min @ -40°C	--	PASS

Ref Date: 23 April 2023