



# MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	N70-B103	MATERIAL	NBR
DUROMETER	70 Shore A	COLOR	Black
DESIGNATION	UL157	REPORT DATE	2020-02-19
TEMP RANGE	-	CURE SYSTEM	Sulfur
SPECIFICATION	ASTM D2000 M2BG708 A14 B14 B34 EA14 EF11 EF21 Z1 Z2		

## PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240-15 <sup>E1</sup>	-	Shore A	72	70 ±5
Tensile Strength	D412-16	-	MPa (PSI)	11.2 (1,624)	8 (1,160) min
Elongation at Break	D412-16	-	%	298	200 min
100% Modulus	D412-16	-	MPa (PSI)	5.12 (743)	-
Density	CNS 5341-96,Method A	-	Mg/m <sup>3</sup>	1.35	-

## A14 – HEAT RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D573-04	70 Hrs @ 100°C (212°F)	points	5	±15
Tensile Strength Change	D573-04	70 Hrs @ 100°C (212°F)	%	12	±30
Elongation Change	D573-04	70 Hrs @ 100°C (212°F)	%	-15	-50 max
Weight Change	D573-04	70 Hrs @ 100°C (212°F)	%	-0.6	-

## B14 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18,Method B	22 Hrs @ 100°C (212°F)	%	10	-

## B34 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18,Method B	22 Hrs @ 100°C (212°F) (plied)	%	23	25 max

## EA14 – FLUID RESISTANCE, WATER RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 100°C (212°F)	points	-2	±10
Tensile Strength Change	D471-16a	70 Hrs @ 100°C (212°F)	%	13	-

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Elongation Change	D471-16a	70 Hrs @ 100°C (212°F)	%	-7	-
Volume Change	D471-16a	70 Hrs @ 100°C (212°F)	%	3.5	±15

### EF11 – FLUID RESISTANCE, ASTM FUEL A RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 23°C (73°F)	points	1	±10
Tensile Strength Change	D471-16a	70 Hrs @ 23°C (73°F)	%	0	-25 max
Elongation Change	D471-16a	70 Hrs @ 23°C (73°F)	%	6	-25 max
Volume Change	D471-16a	70 Hrs @ 23°C (73°F)	%	-1.2	-5 to 10

### EF21 – FLUID RESISTANCE, ASTM FUEL B RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 23°C (73°F)	points	-12	-30 to 0
Tensile Strength Change	D471-16a	70 Hrs @ 23°C (73°F)	%	-15	-60 max
Elongation Change	D471-16a	70 Hrs @ 23°C (73°F)	%	-16	-60 max
Volume Change	D471-16a	70 Hrs @ 23°C (73°F)	%	12.4	0 to 40

### Z1 – LOW TEMPERATURE RETRACTION TEST (TR TEST)

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
TR10, °C	D1329-16	-	-	-27.1	-

### ADDITIONAL APPROVALS

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Data shown is based on supplier testing of compound slabs/buttons and is provided for general reference only.