



# MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	E70-B104	MATERIAL	EPDM
DUROMETER	70 Shore A	COLOR	Black
DESIGNATION	NSF 61	REPORT DATE	2020-05-04
TEMP RANGE	-55°C (-67°F) to 150°C (302°F)	CURE SYSTEM	Peroxide
SPECIFICATION	ASTM D2000 M3DA710 A26 B36 C32 EA14 G11 G21 F19 Z1		

## 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)	16.9 (2,445)	10 (1,450) min
Elongation at Break	D412-16	-	%	206	200 min
100% Modulus	D412-16	-	MPa (PSI)	6.07 (880)	-
Density	CNS 5341-96,Method A	-	Mg/m <sup>3</sup>	1.09	-

## A26 – HEAT RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D865-11	70 Hrs @ 150°C (302°F)	points	-1	10 max
Tensile Strength Change	D865-11	70 Hrs @ 150°C (302°F)	%	-1	-20 max
Elongation Change	D865-11	70 Hrs @ 150°C (302°F)	%	4	-20 max
Weight Change	D865-11	70 Hrs @ 150°C (302°F)	%	0.2	-

## B36 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18,Method B	22 Hrs @ 150°C (302°F) (plied)	%	16.1	25 max

## C32 – ENVIRONMENTAL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Ozone Resistance	D1171-18	50 pphm, 70 Hrs @ 40°C (104°F)	-	PASS	No crack

## EA14 – FLUID RESISTANCE, WATER RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 100°C (212°F)	points	0	-
Tensile Strength Change	D471-16a	70 Hrs @ 100°C (212°F)	%	-3	-

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Elongation Change	D471-16a	70 Hrs @ 100°C (212°F)	%	0	-
Volume Change	D471-16a	70 Hrs @ 100°C (212°F)	%	0.3	±5

**F19 – LOW-TEMPERATURE RESISTANCE**

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Low Temperature Brittleness	D2137-11,Method C	3 minute @ -55°C (-67°F)	-	PASS	-

**G11 – TEAR RESISTANCE**

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Tear Strength (Die B)	D624-00	-	kN/m (lbf/in)	36.9 (211)	-

**G21 – TEAR RESISTANCE**

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Tear Strength (Die C)	D624-00	-	kN/m (lbf/in)	23.6 (135)	-

**ADDITIONAL APPROVALS**

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