



MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	H70-B101	MATERIAL	HNBR
DUROMETER	70 Shore A	COLOR	Black
DESIGNATION	General Purpose	REPORT DATE	2023-09-07
TEMP RANGE	-40°C (-40°F) to 150°C (302°F)	CURE SYSTEM	Peroxide
SPECIFICATION	ASTM D2000 M4DH716 A26 B16 EO16 EO36 F17		

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240-15	-	Shore A	72	70 ±5
Tensile Strength	D412-16	-	MPa (PSI)	26.1 (3,784)	16 (2,321) min
Elongation at Break	D412-16	-	%	293	250 min
100% Modulus	D412-16	-	MPa (PSI)	5.3 (769)	-
Density	CNS 5341-96, Method A	-	Mg/m ³	1.19	-
Tear resistance, (k N/m)	D624-00, die C	-	kN/m (lbf/in)	33.6 (192)	-

A26 – HEAT RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D865-11	70 Hrs @ 150°C (302°F)	points	5	10 max
Tensile Strength Change	D865-11	70 Hrs @ 150°C (302°F)	%	-1	-15 max
Elongation Change	D865-11	70 Hrs @ 150°C (302°F)	%	-8	-25 max
Weight Change	D865-11	70 Hrs @ 150°C (302°F)	%	-0.3	-

B16 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18, Method B	22 Hrs @ 150°C (302°F)	%	11	-

EO16 – FLUID RESISTANCE, IRM 901 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 150°C (302°F)	points	3	-5 to 10
Tensile Strength Change	D471-16a	70 Hrs @ 150°C (302°F)	%	4	-20 max
Elongation Change	D471-16a	70 Hrs @ 150°C (302°F)	%	-6	-30 max
Volume Change	D471-16a	70 Hrs @ 150°C (302°F)	%	-3.4	-10 to 5

E036 – FLUID RESISTANCE, IRM 903 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 150°C (302°F)	points	-6	-15 max
Tensile Strength Change	D471-16a	70 Hrs @ 150°C (302°F)	%	-10	-40 max
Elongation Change	D471-16a	70 Hrs @ 150°C (302°F)	%	-9	-30 max
Volume Change	D471-16a	70 Hrs @ 150°C (302°F)	%	10.8	25 max

F17 – LOW-TEMPERATURE RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Low Temperature Brittleness	D2137-11, Method C	3 minute @ -40°C (-40°F)	-	no crack	-

ADDITIONAL APPROVALS

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