



MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	H80-B101	MATERIAL	HNBR
DUROMETER	80 Shore A	COLOR	Black
DESIGNATION	General Purpose	REPORT DATE	2018-03-05
TEMP RANGE	-	CURE SYSTEM	-
SPECIFICATION	ASTM D2000 M3DH810 A26 B16 EO16 EO36 F17		

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240-15	-	Shore A	83	80 ±5
Tensile Strength	D412-16	-	MPa (PSI)	22.6 (3,272)	10 (1,450) min
Elongation at Break	D412-16	-	%	217	175 min
100% Modulus	D412-16	-	MPa (PSI)	11.5 (1,665)	-
Density	CNS 5341-96, Method A	-	Mg/m ³	1.32	-

A26 – HEAT RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D865-11	70 Hrs @ 150°C (302°F)	points	4	10 max
Tensile Strength Change	D865-11	70 Hrs @ 150°C (302°F)	%	1	-25 max
Elongation Change	D865-11	70 Hrs @ 150°C (302°F)	%	-8	-30 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	D395-16 ^{e1} , Method B	22 Hrs @ 150°C (302°F)	%	12.7	-

EO16 – FLUID RESISTANCE, IRM 901 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 150°C (302°F)	points	2	-5 to 10
Tensile Strength Change	D471-16a	70 Hrs @ 150°C (302°F)	%	9	-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)	%	-2.3	±5

EO36 – 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)	%	1	-30 max
Elongation Change	D471-16a	70 Hrs @ 150°C (302°F)	%	-5	-30 max
Volume Change	D471-16a	70 Hrs @ 150°C (302°F)	%	11	25 max

F17 – LOW-TEMPERATURE RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Low Temperature Brittleness	D2137-11, Method A	3 minute at -40°C (-40°F)	-	pass	pass

ADDITIONAL APPROVALS

-

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