MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	N70-B502	**MATERIAL**	NBR
DUROMETER	70 Shore A	**COLOR**	White
DESIGNATION	FDA	**REPORT DATE**	2026-04-05
TEMP RANGE	-40°C (-40°F) to 100°C (212°F)	**CURE SYSTEM**	Sulfur
SPECIFICATION	–		

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240-15$^{\varepsilon 1}$	–	Shore A	**71**	70 ±5
Tensile Strength	D412-16	–	MPa (PSI)	**12.4 (1,798)**	10 (1,450) min
Elongation at Break	D412-16	–	%	**376**	250 min
100% Modulus	D412-16	–	MPa (PSI)	**3.89 (564)**	–
Density	CNS 5341-96, Method A	–	Mg/m^3	**1.39**	–

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)	%	**-10**	±30
Elongation Change	D573-04	70 Hrs @ 100°C (212°F)	%	**-25**	-50 max
Weight Change	D573-04	70 Hrs @ 100°C (212°F)	%	**-0.9**	–

B14 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18, Method B	22 Hrs @ 100°C (212°F)	%	**16.5**	–

EA14 – FLUID RESISTANCE, WATER RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 100°C (212°F)	points	**-1**	±10
Tensile Strength Change	D471-16a	70 Hrs @ 100°C (212°F)	%	**-15**	–
Elongation Change	D471-16a	70 Hrs @ 100°C (212°F)	%	**-18**	–
Volume Change	D471-16a	70 Hrs @ 100°C (212°F)	%	**8.5**	±15

EF11 – FLUID RESISTANCE, ASTM FUEL A

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 23°C (73°F)	points	**-3**	±10
Tensile Strength Change	D471-16a	70 Hrs @ 23°C (73°F)	%	**-22**	-25 max
Elongation Change	D471-16a	70 Hrs @ 23°C (73°F)	%	**-20**	-25 max
Volume Change	D471-16a	70 Hrs @ 23°C (73°F)	%	**1.8**	-5 to 10

EF21 – FLUID RESISTANCE, ASTM FUEL B

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 23°C (73°F)	points	**-15**	-30 to 0
Tensile Strength Change	D471-16a	70 Hrs @ 23°C (73°F)	%	**-51**	-60 max
Elongation Change	D471-16a	70 Hrs @ 23°C (73°F)	%	**-51**	-60 max
Volume Change	D471-16a	70 Hrs @ 23°C (73°F)	%	**26.3**	0 to 40

EO14 – FLUID RESISTANCE, IRM 901 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 100°C (212°F)	points	**2**	-5 to 10
Tensile Strength Change	D471-16a	70 Hrs @ 100°C (212°F)	%	**-5**	-25 max
Elongation Change	D471-16a	70 Hrs @ 100°C (212°F)	%	**-25**	-45 max
Volume Change	D471-16a	70 Hrs @ 100°C (212°F)	%	**-6.1**	-10 to 5

EO34 – FLUID RESISTANCE, IRM 903 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 100°C (212°F)	points	**-5**	-10 to 5
Tensile Strength Change	D471-16a	70 Hrs @ 100°C (212°F)	%	**-8**	-45 max
Elongation Change	D471-16a	70 Hrs @ 100°C (212°F)	%	**-20**	-45 max
Volume Change	D471-16a	70 Hrs @ 100°C (212°F)	%	**5.2**	0 to 25

ADDITIONAL APPROVALS

FDA

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