



MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	N70-C401	MATERIAL	NBR
DUROMETER	70 Shore A	COLOR	Blue
DESIGNATION	Metal Detectable	REPORT DATE	2024-02-16
TEMP RANGE	-40°C (-40°F) to 100°C (212°F)	CURE SYSTEM	-
SPECIFICATION	ASTM D2000 M2BG707 B14 EA14 EF11 EF21 EO14 EO34 Z		

PHYSICAL PROPERTIES					
PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240 - 15	-	Shore A	67	70 ±5
Elongation at Break	D412-16	-	%	520	200 min
Specific Gravity	D297-21	-	g/cm ³	1.49	-

HEAT AGING					
PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D2240	70h @ 212°F (100°C)	points	2	±15
Tensile Strength Change	D412	70h @ 212°F (100°C)	%	-5	±30
Elongation Change	D412	70h @ 212°F (100°C)	%	-28	-50 max

B14 – COMPRESSION SET					
PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395 - 18	22h @ 212°F (100°C)	%	19	25 max

EA14 – FLUID RESISTANCE, WATER RESISTANCE					
PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	Water Resistance, 70h @ 212°F (100°C)	points	3	±10
Volume Change	D471-16a	Water Resistance, 70h @ 212°F (100°C)	%	4	±15

EF11 – FLUID RESISTANCE, FUEL A					
PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	Fuel A, 70h @ 73°F (23°C)	points	-2	±10
Tensile Strength Change	D471	Fuel A, 70h @ 73°F (23°C)	%	-14	-25 max
Elongation Change	D471	Fuel A, 70h @ 73°F (23°C)	%	-15	-25 max
Volume Change	D471	Fuel A, 70h @ 73°F (23°C)	%	1	-5 to 10

EF21 – FLUID RESISTANCE, FUEL B

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	Fuel B, 70h @ 73°F (23°C)	points	-10	-30 to 0
Tensile Strength Change	D471	Fuel B, 70h @ 73°F (23°C)	%	-46	-60 max
Elongation Change	D471	Fuel B, 70h @ 73°F (23°C)	%	-54	-60 max
Volume Change	D471	Fuel B, 70h @ 73°F (23°C)	%	25	0 to 40

E014 – FLUID RESISTANCE, IRM 901 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	IRM 901 Oil, 70h @ 212°F (100°C)	points	3	-5 to 10
Tensile Strength Change	D471	IRM 901 Oil, 70h @ 212°F (100°C)	%	-1	-25 max
Elongation Change	D471	IRM 901 Oil, 70h @ 212°F (100°C)	%	-35	-45 max
Volume Change	D471	IRM 901 Oil, 70h @ 212°F (100°C)	%	-1	-10 to 5

E034 – FLUID RESISTANCE, IRM903 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	IRM903 Oil, 70h @ 212°F (100°C)	points	-3	-10 to 5
Tensile Strength Change	D471	IRM903 Oil, 70h @ 212°F (100°C)	%	-3	-45 max
Elongation Change	D471	IRM903 Oil, 70h @ 212°F (100°C)	%	-29	-45 max
Volume Change	D471	IRM903 Oil, 70h @ 212°F (100°C)	%	9	0 to 25

Z – PHYSICAL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
TR-10 Retraction at Lower Temperature Resistance	D1329-16	-	°C (°F)	-25.9 (-14.6)	-

ADDITIONAL APPROVALS

FDA

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