



MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	E70-B105	MATERIAL	EPDM
DUROMETER	70 Shore A	COLOR	Black
DESIGNATION	FDA	REPORT DATE	2023-08-03
TEMP RANGE	-55°C (-67°F) to 125°C (257°F)	CURE SYSTEM	Sulfur
SPECIFICATION	ASTM D2000 M5CA710 A25 B35 C32 EA14 F17 Z1 Z2		

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240-15	-	Shore A	70	70 ±5
Tensile Strength	D412-16	-	MPa (PSI)	10.8 (1,565)	10 (1,450) min
Elongation at Break	D412-16	-	%	267	200 min
100% Modulus	D412-16	-	MPa (PSI)	4.9 (711)	-
Density	CNS 5341-96, Method A	-	Mg/m ³	1.27	-

A25 – HEAT RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D865-11	70 Hrs @ 125°C (257°F)	points	0	10 max
Tensile Strength Change	D865-11	70 Hrs @ 125°C (257°F)	%	-1	-20 max
Elongation Change	D865-11	70 Hrs @ 125°C (257°F)	%	-12	-40 max
Weight Change	D865-11	70 Hrs @ 125°C (257°F)	%	0.2	-

B35 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18, Method B	22 Hrs @ 125°C (257°F) (plied)	%	48.3	50 max

C32 – ENVIRONMENTAL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Ozone Resistance	D1171-18	70 Hrs @ 40°C (104°F)	-	no-cracks	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	1	-
Tensile Strength Change	D471-16a	70 Hrs @ 100°C (212°F)	%	-2	-

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Elongation Change	D471-16a	70 Hrs @ 100°C (212°F)	%	-8	-
Volume Change	D471-16a	70 Hrs @ 100°C (212°F)	%	1.3	±5

F 17 – LOW-TEMPERATURE RESISTANCE

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

ADDITIONAL APPROVALS

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