



# MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	V90-B701	MATERIAL	FKM
DUROMETER	90 Shore A	COLOR	Green
DESIGNATION	-	REPORT DATE	2025-04-07
TEMP RANGE	-25°C (-13°F) to 250°C (482°F)	CURE SYSTEM	Bisphenol
SPECIFICATION	ASTM D2000 M3HK910 A1-10 B37 B38 EF31 EO78		

## PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240-15, Type A	-	Shore A	89	90 ±5
Tensile Strength	D412-16, Method A	-	MPa (PSI)	16.1 (2,341)	10 (1,450) min
Elongation at Break	D412-16, Method A	-	%	120	100 min
100% Modulus	D412-16, Method A	-	MPa (PSI)	13.6 (1,971)	-
Density	CNS 5341-96, Method A	-	Mg/m <sup>3</sup>	1.84	-

## A1-10 – HEAT RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D573-04	70h @ 250°C (482°F)	points	2	10 max
Tensile Strength Change	D573-04	70h @ 250°C (482°F)	%	-2	-25 max
Elongation Change	D573-04	70h @ 250°C (482°F)	%	-10	-25 max
Weight Change	D573-04	70h @ 250°C (482°F)	%	-2	-

## B37 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18, Method B	22h @ 175°C (347°F) (plied)	%	16.1	30 max

## B38 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18, Method B	22h @ 200°C (392°F) (plied)	%	19.6	50 max

## EF31 – FLUID RESISTANCE, ASTM FUEL C RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70h @ 23°C (73°F)	points	-3	±5
Tensile Strength Change	D471-16a	70h @ 23°C (73°F)	%	-8	-25 max

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Elongation Change	D471-16a	70h @ 23°C (73°F)	%	-7	-20 max
Volume Change	D471-16a	70h @ 23°C (73°F)	%	2.8	0 to 10

**E078 – FLUID RESISTANCE, ASTM NO. 101 OIL**

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70h @ 200°C (392°F)	points	-8	-15 to 5
Tensile Strength Change	D471-16a	70h @ 200°C (392°F)	%	-12	-40 max
Elongation Change	D471-16a	70h @ 200°C (392°F)	%	5	-20 max
Volume Change	D471-16a	70h @ 200°C (392°F)	%	7.3	0 to 15

**ADDITIONAL APPROVALS**

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