MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	V75-B103	**MATERIAL**	FKM
DUROMETER	75 Shore A	**COLOR**	Black
DESIGNATION	Low Temp	**REPORT DATE**	2024-03-20
TEMP RANGE	-48°C (-54°F) to 200°C (392°F)	**CURE SYSTEM**	–
SPECIFICATION	Parker V1289-75		

PHYSICAL PROPERTIES – 270°C (518°F)

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D573-04	70 Hrs @ 518°F (270 °C)	points	**-2**	-10 to 5
Tensile Strength Change	D573-04	70 Hrs @ 518°F (270 °C)	%	**-41**	-45 max
Elongation Change	D573-04	70 Hrs @ 518°F (270 °C)	%	**25**	-10 max
Weight Change	D573-04	70 Hrs @ 518°F (270 °C)	%	**-7.7**	-10 max

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240-15	–	Shore A	**77**	75 ±5
Tensile Strength	D1414-22	–	MPa (PSI)	**14.9 (2,167)**	9 (1,300) min
Elongation at Break	D1414-22	–	%	**178**	120 min
100% Modulus	D1414-22	–	MPa (PSI)	**6.79 (985)**	–
Density	CNS 5341-96,Method A	–	Mg/m^3	**1.86**	–

COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D1414-22	336 Hrs @ 275°F (135 °C)	%	**13.2**	–
Compression Set	D1414-22	22 Hrs @ 392°F (200 °C)	%	**15.7**	–
Compression Set	D1414-22	336 Hrs @ 392°F (200 °C)	%	**31.3**	–

FLUID RESISTANCE – ASTM FUEL B RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 23°C (73°F)	points	**-7**	-10 max
Tensile Strength Change	D471-16a	70 Hrs @ 23°C (73°F)	%	**-28**	-35 max
Elongation Change	D471-16a	70 Hrs @ 23°C (73°F)	%	**-19**	-20 max
Volume Change	D471-16a	70 Hrs @ 23°C (73°F)	%	**4.9**	1 to 10

FLUID RESISTANCE – MIL-PRF-83282 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 275°F (135 °C)	points	**-3**	-7 max
Tensile Strength Change	D471-16a	70 Hrs @ 275°F (135 °C)	%	**-2**	-25 max
Elongation Change	D471-16a	70 Hrs @ 275°F (135 °C)	%	**1**	-15 max
Volume Change	D471-16a	70 Hrs @ 275°F (135 °C)	%	**2.3**	6 max

FLUID RESISTANCE – REFERENCE OIL 300

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 392°F (200 °C)	points	**-6**	-10 max
Hardness Change	D471-16a	70 Hrs @ 275°F (135 °C)	points	**-6**	-10 max
Tensile Strength Change	D471-16a	70 Hrs @ 392°F (200 °C)	%	**-8**	-30 max
Elongation Change	D471-16a	70 Hrs @ 392°F (200 °C)	%	**-1**	-20 max
Volume Change	D471-16a	70 Hrs @ 392°F (200 °C)	%	**7.2**	0 to 10
Tensile Strength Change	D471-16a	70 Hrs @ 275°F (135 °C)	%	**-6**	-30 max
Elongation Change	D471-16a	70 Hrs @ 275°F (135 °C)	%	**3**	-20 max
Volume Change	D471-16a	70 Hrs @ 275°F (135 °C)	%	**5.9**	0 to 10

LOW TEMPERATURE – LOW TEMPERATURE RETRACTION TEST

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
TR10, ℃	D1329-16	–	–	**-40.4**	-38 max

ADDITIONAL APPROVALS

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