

Material Test Report

Compound V70-B101

FKM, UL 157

Material Summary		
Material Type:	FKM	
Durometer:	70	
Color:	Black	
Special Properties:	UL 157	
Recommended Temperature Range (Static):	-40°C (-40°F) to 250°C (482°F)	
Cure System:	Peroxide	
Meets Specification:	ASTM D2000 M2HK710 A1-10 B37 B38 EF31 EO78 EO88 F15 Z1	
Original Properties	Requirements	Typical Results
Hardness, (Shore A) (ASTM D2240-15)	70±5	71
Tensile Strength, psi(MPa) (ASTM D412-16)	1450(10)(min)	2446(16.87)
Elongation, (%) (ASTM D412-16)	175(min)	255
Modulus at 100%, psi(MPa) (ASTM D412-16)		650(4.48)
Density, (Mg/m ³) (CNS 5341-96, Method A)		1.88
HEAT AGE, A1-A10 (70 hrs. @ 250°C)	Requirements	Typical Results
Hardness Change, pts, Shore A, ASTM D573-04	+10(max)	+1
Tensile Strength Change, %, ASTM D573-04	-25(max)	-24
Elongation Change, %, ASTM D573-04	-25(max)	+50
Weight Change, %		-1.4
COMPRESSION SET, B37 (22 hrs. @ 175°C)	Requirements	Typical Results
ASTM D395-18, Method B	50%(plied)(max)	15.7
COMPRESSION SET, B38 (22 hrs. @ 200°C)	Requirements	Typical Results
ASTM D395-18, Method B	50%(plied)(max)	20.8
FUEL C RESISTANCE, EF31 (70 hrs. @ 23°C)	Requirements	Typical Results
Hardness Change, pts, Shore A, ASTM D471-16a	±5	-3
Tensile Strength Change, %, ASTM D471-16a	-25(max)	-25
Elongation Change, %, ASTM D471-16a	-20(max)	-15
Volume Change, %, ASTM D471-16a	0~+10	+4.8
NO. 101 OIL, EO78 (70 hrs. @ 200°C)	Requirements	Typical Results
Hardness Change, pts, Shore A, ASTM D471-16a	-15~+5	-4
Tensile Strength Change, %, ASTM D471-16a	-40(max)	-20
Elongation Change, %, ASTM D471-16a	-20(max)	-9
Volume Change, %, ASTM D471-16a	0~+15	+8.5

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MOBIL JET OIL II, EO88 (70 hrs. @ 200°C)	Requirements	Typical Results
Hardness Change, pts, Shore A, ASTM D471-16a	-15~+5	-4
Tensile Strength Change, %, ASTM D471-16a	-40(max)	-15
Elongation Change, %, ASTM D471-16a	-20(max)	-6
Volume Change, %, ASTM D471-16a	+25(max)	+6.3
LOW TEMP BRITTLENESS POINT TEST, F15	Requirements	Typical Results
3 min @ -25°C, ASTM D2137-11, Method C	-	-
Sample type: T-50,	-	-
Coolant : Isopropyl alcohol,	-	-
Low Temperature Property,	no-cracks	pass

Report Date: 3/23/2022

Information within this report is believed to be accurate and reliable. However, Global O-Ring and Seal makes no warranty, expressed or implied, that parts supplied in this material will perform satisfactorily in specific applications. It's the customer's responsibility to evaluate prior to use.