

Material Datasheet

Compound V90-B101

FKM, Black, General Purpose

Material Summary

Material Type:	FLUOROCARBON RUBBER	
Durometer:	90	
Color:	Black	
Special Properties:	General Purpose	
Recommended Temperature Range (Static):	-25°C (-13°F) to 250°C (482°F)	
Cure System:	Bisphenol	
Meets Specification:	ASTM D2000 M3HK910 A1-10 B37 B38 EF31 EO78	
Original Properties	Requirements	Typical Results
Hardness, Shore A, pts, ASTM D2240-15	90 ± 5	89
Tensile Strength, psi, min, ASTM D412-16	10 (1450) (min)	16.14 (2341)
Elongation, min, %, ASTM D412-16	100 (min)	120
Modulus @ 100%, psi, ASTM D412-16		13.59 (1971)
Density, Mg/m ³ , CNS 5341-96, Method A		1.84
HEAT AGE, A1-A10 (70 hrs. @ 250°C)	Requirements	Typical Results
Hardness Change, pts, Shore A, ASTM D573-04	+10 (max)	+2
Tensile Strength Change, %, ASTM D573-04	-25 (max)	-2
Elongation Change, %, ASTM D573-04	-25 (max)	-10
Weight Change, %		-2.0
COMPRESSION SET, B37 (22 hrs. @ 175°C)	Requirements	Typical Results
ASTM D395-18, Method B	30 %(plied)(max)	16.1
COMPRESSION SET, B38 (22 hrs. @ 200°C)	Requirements	Typical Results
ASTM D395-18, Method B	50 %(plied)(max)	19.6
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)	-8
Elongation Change, %, ASTM D471-16a	-20 (max)	-7
Volume Change, %, ASTM D471-16a	0 to +10	+2.8
NO. 101 OIL, EO78 (70 hrs. @ 200°C)	Requirements	Typical Results
Hardness Change, pts, Shore A, ASTM D471-16a	-15 to +5	-8
Tensile Strength Change, %, ASTM D471-16a	-40 (max)	-12
Elongation Change, %, ASTM D471-16a	-20 (max)	+5
Volume Change, %, ASTM D471-16a	0 to +15	+7.3

Compound Previously Known As: V90101

Report Date: 4/7/2025

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