

COMPOUND DATA SHEET

Parker O-Ring Division, North America

MATERIAL REPORT

Report Number: 110894 7/31/2015



CONTACT US

Title: Evaluation of Parker Compound

Elastomer Type: Fluorocarbon (FKM) VM100-75

<u>Purpose:</u> To obtain typical test data.

Specification: ASTM D2000 M2HK810 A1-10 B38 EF31 EO78 Z1

 $Z1 = 75 \pm 5$ durometer

Color: Black

Recommended Temperature Range: -15°F to 400°F

Recommended For: Mineral oil and grease, IRM 901 oil, IRM 902 oil, IRM 903 oil,

nonflammable hydraulic fluids, silicone oils and greases, aliphatic hydrocarbons (propane, butane, natural gas), aromatic hydrocarbons (benzene, toluene), chlorinated hydrocarbons (trichloroethylene and carbon tetrachloride), gasoline, high vacuum, ozone, weather, and

aging resistance.

Not Recommended For:

Glycol based brake fluids, ammonia gas, amines, alkalis, superheated

steam, and low molecular weight organic acids (formic and acetic

acids).

Certifications: AMS 7276

REPORT DATA

Original Physical Properties	Test Method	Spec Limits	Results
(Z1) Hardness, Shore A, pts.	ASTM D2240	75 ±5	80
Tensile Strength, PSI (Mpa)	ASTM D412	1450 (10)	2124
Ultimate Elongation, %	ASTM D412	150	157
Fluid Resistance (Basic Requirement)			
IRM 903, 70 hrs @ 302°F			
Volume Change, %	ASTM D471	+10	+2
Compression Set (Basic Requirement)			
22 hrs @ 347°F	ASTM D395 Method B	35	13
(A1-10) Heat Age			
70 hrs. @ 482°F			
Hardness Change, pts.	ASTM D573	+10	+5
Tensile Strength Change, %		-25	+5
Ultimate Elongation Change, %		-25	+9
(B38) Compression Set (Plied)			
22 hrs. @ 392°F			
Percent of Original Deflection, Max	ASTM D395 Method B	50	15
(EF31) Fluid Resistance			
Fuel C, 70 hrs @ 73°F			
Hardness Change, pts.	ASTM D471	± 5	0
Tensile Strength Change, %		-25	-3
Ultimate Elongation Change, %		-20	+4
Volume Change, %		0 to +10	+3
(E078) Fluid Resistance			
Service Fluid 101, 70 hrs @ 392°F			
Hardness Change, pts.	ASTM D471	-15 to +5	-5
Tensile Strength Change, %		-40	-1
Ultimate Elongation Change, %		-20	+15
Volume Change, %		0 to +15	+10