



COMPOUND DATA SHEET

Parker O-Ring Division, North America

MATERIAL REPORT

Report Number: 92880
Date: 3/13/2013

Title: Evaluation of Parker Compound VM835-75

Elastomer Type: Fluorocarbon (FKM)

Purpose: To obtain typical test data.

Specification: ASTM D2000 M2HK710 A1-10 B38 E078 Z1 (Shore A Hardness 75 +/-5), Z2 Elongation 125% min, Z3 (Specific Gravity), Z4 (TR-10)

Color: Black

Recommended Temperature Range: -40°F to 400°F

Recommended For: Mineral oil and grease, ASTM No. 1 oil, IRM 902 oil, IRM 903 oil, non-flammable 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).

Additional Approvals: N/A

REPORT DATA

<u>Original Physical Properties</u>	<u>Test Method</u>	<u>Spec Limits</u>	<u>Test Results</u>
(Z1) Hardness, Shore A, pts.	ASTM D2240	75 ±5	78
Tensile Strength, PSI (Mpa)	ASTM D412	1450 (10)	3059
(Z2) Ultimate Elongation, %	ASTM D412	125	215
(Z3) Specific Gravity	ASTM D297	as received	1.84
Fluid Resistance (Basic Requirement)			
<u>IRM 903, 70 hrs @ 302°F</u>			
Volume Change, %	ASTM D471	+10	+2
(A1-10) Heat Age			
<u>70 hrs. @ 482°F</u>			
Hardness Change, pts.	ASTM D573	+10	+3
Tensile Strength Change, %		-25	-22
Ultimate Elongation Change, %		-25	+8
(B38) Compression Set (Plied)			
<u>22 hrs. @ 392°F</u>			
Percent of Original Deflection, Max	ASTM D395 Method B	50	13
(E078) Fluid Resistance			
<u>Service Fluid 101, 70 hrs @ 392°F</u>			
Hardness Change, pts.	ASTM D471	-15 to +5	-8
Tensile Strength Change, %		-40	-6
Ultimate Elongation Change, %		-20	-1
Volume Change, %		0 to +15	+11
(Z4) Low Temperature Resistance			
TR-10, temperature °F , C	ASTM D1329	report	-22 (-30)

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