COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division, North America

MATERIAL REPORT

Title: Evaluation of Parker Compound VW076-75

Elastomer Type: Fluorocarbon (FKM)

Purpose: To obtain typical test data. Reference project 2018-0120

Color: Brown

Specification: ASTM D2000 M2HK 810 A1-10 B37 B38 EF31 Z1 Z2 Z3 Z4

Z1 = 75±5 durometer

Z2 = Elongation 125%

Z3 = Brown

Z4 = Comp Set 168 hours @ 200° C max, .139 c/s; Max 45%

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

Recommended For: Mineral oil and grease, 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).

REPORT DATA

Original Physical Properties	**Test Method**	**Spec Limits**	**VW076-75**	V0884-75
(Z1) Hardness, Shore A, pts	ASTM D2240	75 ± 5	71	77
Tensile Strength, psi, Min	ASTM D412	1450	2306	1979
(Z2) Ultimate Elongation, % Min	ASTM D412	125	148	207
(Z3) Color		Brown		Brown
BASIC = IRM 903 Test Fluid, 70 hrs @ 302°F (150°C)	ASTM D471			
Volume Change, %		+10	1	2
A1-10 Heat Age – 70 hrs @ 482°F (250°C)				
Hardness Change, pts.	ASTM D573	+10	3	3
Tensile Strength Change, %, Max		-25	-5	-1
Elongation Change, %, Max		-25	9	-20
B37 Compression Set (Plied) 22 hrs @ 347°F (175°C)				
Percent of Original Deflect, Max	ASTM D395 Method B	50	5	
B38 Compression Set (Plied) 22 hrs @ 392°F (200°C)				
Percent of Original Deflect, Max	ASTM D395 Method B	50	9	
EF31 Fluid Resistance Fuel C, 70 hrs @ 73°F (23°C)	ASTM D471			
Hardness, Shore A, pts		±5	0	
Tensile Strength, psi, Min		-25	-19	
Ultimate Elongation, % Min		-20	-5	
Volume Change, %		0 to +10	3	
(Z4) Compression Set .139" thick cross section Air, 168 hrs @ 392°F (200°C)	ASTM D395			
Percent of Original Deflection, Max	ASTM D1414	45	35	