COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division, North America

MATERIAL REPORT

Report Number: 138862,138717, 45322
Date: 03/23/2022

Title: Evaluation of Parker Compound VG130-75

Elastomer Type: Fluorocarbon (FKM)

Purpose: To obtain typical test data.

Color: Black

Specification: ASTM D2000 M2HK707 A1-10 B37 B38 E078 Z1 (Shore A Hardness 75 +/-5), Z2 Elongation 100% min, Z3 (Specific Gravity), Z4 (TR-10), Z5 Long Term Compression Set

Recommended Temperature Range: -50°F to 400°F

Recommended For: Mineral oil and grease, ASTM No. 1 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).

Additional Approvals:

REPORT DATA

Original Physical Properties	**Test Method**	**Spec Limits**	**Results**
(Z1) Hardness, Shore A, pts	ASTM D2240	75 ± 5	77
Tensile Strength, psi (Mpa), Min	ASTM D412	1450 (10)	1669 (11.51)
(Z2) Ultimate Elongation, % Min	ASTM D412	100	168
(Z3) Specific Gravity	ASTM D297	As received	1.74
(Basic Requirement) Fluid Resistance IRM 903, 70 hrs @ 302°F			
Volume Change, %	ASTM D471	+10	+2
(A1-10) Heat Age - 70 hrs @ 482°F			
Hardness Change, pts.	ASTM D573	+10	-1
Tensile Strength Change, %, Max		-25	-20
Ultimate Elongation Change, %, Max		-25	-10
(B37) Compression Set (Plied) - 22 hrs @ 347°F			
Percent of Original Deflect, Max	ASTM D395 Method B	50	5
(B38) Compression Set (Plied) - 22 hrs @ 392°F			
Percent of Original Deflect, Max	ASTM D395 Method B	50	5
(Z5) Long Term Compression Set (336 hrs. @ 200° C)			
Percent of Original Deflect, Max	ASTM D395 Method B	55	41
(EO78) Fluid Resistance Mobil Jet II*, 70 hrs @ 392°F			
Hardness, Shore A, pts	ASTM D471	-15 to +5	-3
Tensile Strength, psi, Min		-40	-13
Ultimate Elongation, % Min		-20	-3
Volume Change, %		0 to +15	+5
(Z4) Low Tempature Resistance			
TR-10, temperature °F (°C)	ASTM D1329	Report	-44 (-42)

*Mobil Jet II used as the recommended replacement for Service Fluid 101 which is no longer readily available