Parker

Compound Data Sheet
Parker O-Ring & Engineered Seals Division United States

MATERIAL REPORT

Report Number: 119040
4/28/2017

Title: Evaluation of Parker Compound

Elastomer Type: Polyacrylate (ACM) AA154-75

Purpose: To obtain typical test data

Specification: ASTM D2000 M2DH710 A26 B36 EO36 F14 Z1 Z2
Z1 = 100% minimum elongation
Z2 = 75 ± 5 Durometer

Color: Black

Recommended Temperature Range: -5°F to 250°F

Recommended For: Mineral oil (engine, gear box, ATF oil), Ozone, weather, and aging resistance

Not Recommended For: Glycol based brake fluids (DOT 3 & DOT 4), aromatics and chlorinated hydrocarbons, hot water. Steam, acids, alkalis, and amines

REPORT DATA

Original Physical Properties	**Test Method**	**Spec Limits**	**Test Results**
Hardness, Shore A. pts. (Z2)	ASTM D2240	75±5	79
Tensile Strength, MPa, min.	ASTM D412	10	12
Ultimate Elongation, % (Z1)	ASTM D412	100	165
Modulus at 50% Elongation, MPa	ASTM D412	Report	4
Modulus at 100% Elongation, MPa	ASTM D412	Report	9
Specific Gravity, ±0.02	ASTM D297	1.35	1.34
Compression Set			
22 hrs. @ 150°C (Basic)	ASTM D395		
Percent of Original Deflection, Max	Method B	60	12
Compression Set			
22 hrs. @ 150°C (B36)	ASTM D395		
Percent of Original Deflection, Max	Method B	50	27
Dry Heat Resistance			
70 hrs. @ 150°C	ASTM D865		
Hardness Change, pts.		+10	+6
Tensile Strength Change, %		- 25	+6
Elongation Change, %		- 30	- 2
Fluid Immersion			
IRM 901, 70 hrs. @ 150°C (EO16)	ASTM D471		
Hardness Change, pts.		-5 to +10	+7
Tensile Strength Change, %		-20	+15
Elongation Change, %		-30	+1
Volume Change, %		±5	-2
Fluid Immersion			
IRM 903, 70 hrs @ 150°C (EO36)	ASTM D471		
Hardness Change, pts.		-15	-6
Tensile Strength Change, %		-40	+16
Elongation Change, %		-40	-4
Volume Change, %		+25	+9
Low Temperature Brittleness (F14)	ASTM D2137		
Nonbrittle after 3 min. @ -18°C		Pass	Pass