COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division, North America

MATERIAL REPORT

Report Number: 94134 (*125610)
11/1/2013

Title: Evaluation of Parker Compound

Elastomer Type: Fluorocarbon (FFKM) FF582-90

Purpose: To obtain typical test data.

Color: Black

Recommended Temperature Range: 5°F to 525°F

Recommended For: Aliphatic and aromatic hydrocarbons, chlorinated hydrocarbons, polar solvents (acetone, methylethylketone, dioxane), inorganic and organic acids, water and steam, high vacuum with minimal weight loss, petroleum oil, we/dry chlorine.

Not Recommended For: Fluorinated refrigerants (R11, R12, R13, R113, R114), uranium hexafluoride, molten metals, gaseous and alkali metals

Original Physical Properties	**Test Method**	**Test Results**
Hardness, Shore A, pts.	ASTM D2240	90
Tensile Strength, psi	ASTM D1414	2862
Ultimate Elongation	ASTM D1414	113
Modulus at 25% Elongation	ASTM D1414	594
Modulus at 50% Elongation	ASTM D1414	1412
Modulus at 75% Elongation	ASTM D1414	2117
Modulus at 100% Elongation	ASTM D1414	2639
Specific Gravity	ASTM D297	1.87
Compression Set		
70 hrs. @ 230°C		
Percent of Original Deflection, max	ASTM D395 Method B	25
Compression Set		
70 hrs. @ 250°C		
Percent of Original Deflection, max	ASTM D395 Method B	N/T
Fluid Immersion		
Steam, (336 hrs. @ 125°C)		
Hardness Change, pts	ASTM D471	-5
Volume Change, %		+5
Fluid Immersion		
Water, (336 hrs. @ 125°C)		
Hardness Change, pts	ASTM D471	0
Volume Change, %		+5
Fluid Immersion		
Steam, (70 hrs. @ 181°C)		
Hardness Change, pts.	ASTM D471	-5
Volume Change, %		+5
Fluid Immersion		
Water, (70 hrs. @ 181°C)		
Hardness Change, pts.	ASTM D471	-3
Volume Change, %		+7
Fluid Immersion		
Steam, (70 hrs. @ 260°C)		
Hardness Change, pts.	ASTM D471	-10
Tensile Strength Change, psi		-33
Ultimate Elongation Change, psi		+27
Modulus at 25% Elongation Change, psi		-48
Modulus at 50% Elongation Change, psi		-51

Modulus at 75% Elongation Change, psi		-48
Modulus at 100% Elongation Change, psi		-44
Volume Change, %		+16

Fluid Immersion

Water, (70 hrs. @ 260°C)

Hardness Change, pts.	ASTM D471	-11
Tensile Strength Change, psi		-30
Ultimate Elongation Change, %		+30
Modulus at 25% Elongation Change, psi		-52
Modulus at 50% Elongation Change, psi		-54
Modulus at 75% Elongation Change, psi		-49
Modulus at 100% Elongation Change, psi		-45
Volume Change, %		+21

Low Temperature (*)	ASTM D1329	
TR-10, °C (°F)		-4°C (25°F)