COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division, North America

MATERIAL REPORT

Report Number: 54391
Test Date: 2/15/2008
Report Date: 7/20/2017

Title: Evaluation of Parker Compound KB163-90

Elastomer Type: Hydrogenated Nitrile (HNBR, HSN)

Purpose: To obtain typical test data.

Specification: Testing to common EOG fluids and conditions

Color: Black

Recommended Temperature Range: -25°F to 300°F/325°F

Recommended For: Aliphatic hydrocarbons (propane, butane, petroleum oil, mineral oil and grease, diesel fuel, fuel oils) vegetable oils, animal fats, mineral oils, greases, HFA, HFB, and HFC hydraulic fluids, glycols, water, salt & alkali solutions, dilute acids bases and salt solutions at moderate temperatures, ozone, aging and weathering

Not Recommended For: Chlorinated hydrocarbons (Trichloroethylene), strong acids, polar solvents (ketone, acetone, acetic acid, ethylene-ester), auto and aircraft brake fluids

Additional Approvals: NORSOK M-710 for RGD & Sour Gas
ISO 23936-2 RGD & Sour Gas

REPORT DATA

Original Physical Properties	**Test Method**	**Test Results**
Shore A Durometer, pts.	ASTM D2240	89
Tensile Strength, PSI	ASTM D412	3642
Ultimate Elongation, %	ASTM D412	133
Modulus at 100% Elongation, %	ASTM D412	3168
Specific Gravity	ASTM D297	1.32
Compression Set		
70 hrs. @ 302°F		
Percent of Original Deflection	ASTM D395 Method B	21
Dry Heat Resistance		
70 hrs. @ 302°F		
Hardness Change, pts.	ASTM D573	+4
Tensile Change, %		+4
Elongation Change, %		-18
Distilled Water		
70 hrs. @ 212°F		
Hardness Change, pts.	ASTM D471	0
Tensile Change, %		-7
Elongation Change, %		+2
Volume Change, %		+2
Diesel #2 Low Sulfur		
70 hrs. @ 212°F		
Hardness Change, pts.	ASTM D471	-10
Tensile Change, %		-18
Elongation Change, %		-13
Volume Change, %		+15
Methanol		
70 hrs. @ 73°F		
Hardness Change, pts.	ASTM D471	-10
Tensile Change, %		-34
Elongation Change, %		-16
Volume Change, %		11
Erifon 818		
70 hrs. @ 158°F		
Hardness Change, pts.	ASTM D471	-1
Tensile Change, %		-18
Elongation Change, %		-3

Volume Change		+2
Baroid ZnBr		
70 hrs. @ 212°F		
Hardness Change, pts.	ASTM D471	+3
Tensile Change, %		+56
Elongation Change, %		-25
Volume Change, %		+14
Low Temperature		
TR-10, °C	ASTM D1329	-21
Explosive Decompression		
Per NACE standard TM0192-2003	Rating	-1 No Damage