



# COMPOUND DATA SHEET

Parker O-Ring Division, North America

## MATERIAL REPORT

MTR Report Number: 157434  
Date: 3/13/2013

**Title:** Evaluation of Parker Compound KA158-70

**Elastomer Type:** Hydrogenated Nitrile (HNBR, HSN)

**Purpose:** To obtain typical test data.

**Specification:** ASTM D2000 M2DH716 A26 B16 EO16 EO36 Z1 (Elongation min, 175%), Z2 (TR-10)

**Color:** Black

**Recommended Temperature Range:** -40°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, water, salt & alkali solutions, dilute acids bases and salt solutions at moderate temperatures, ozone, aging and weathering

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

**Additional Approvals:** N/A

## REPORT DATA

<u>Original Physical Properties</u>	<u>Test Method</u>	<u>Spec Limits</u>	<u>Test Results</u>
Hardness, Shore A, pts.	ASTM D2240	70 ±5	72
Tensile Strength, PSI	ASTM D412	2321	3020
<b>(Z1) Ultimate Elongation, %</b>	ASTM D412	175	213
<b>(A26) Heat Age</b>			
<b><u>70 hrs. @ 302°F</u></b>			
Hardness Change, pts.	ASTM D573	+10	+4
Tensile Strength Change, %		-25	-8
Ultimate Elongation Change, %		-30	+14
<b>(B16) Compression Set (Buttons)</b>			
<b><u>22 hrs. @ 302°F</u></b>			
Percent of Original Deflection, Max	ASTM D395 Method B	30	8
<b>(E016) Fluid Resistance</b>			
<b><u>IRM 901, 70 hrs @ 302°F</u></b>			
Hardness Change, pts.	ASTM D471	-0 to +10	+2
Tensile Strength Change, %		-20	-2
Ultimate Elongation Change, %		-30	+9
Volume Change, %		± 5	-1
<b>(E036) Fluid Resistance</b>			
<b><u>IRM 903, 70 hrs @ 302°F</u></b>			
Hardness Change, pts.	ASTM D471	-15	-10
Tensile Strength Change, %		-40	-8
Ultimate Elongation Change, %		-40	-5
Volume Change, %		+25	+22
<b><u>(Z2) Low Temperature Resistance</u></b>			
TR-10, temperature °F (°C)	ASTM D1329	-24 (-31)	-29 (-34)

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