



MATERIAL REPORT

REPORT NUMBER:

DATE:

TITLE: Evaluation of Parker Compound V1411-90 to ASTM D2000
M7HK914 A1-11 B38 EF31 E088

PURPOSE: To determine if V1411-90 meets the requirements.

CONCLUSION: Compound V1411-90 meets the ASTM D2000 callout.

Recommended temperature limits: -15⁰F to 400⁰F

Recommended For

Petroleum, mineral, and vegetable oils
Silicone fluids
Aromatic hydrocarbons (benzene, toluene)
Chlorinated hydrocarbons
High vacuum
Ozone, weather, and aging resistance

Not Recommended For

Hot water and steam
Auto and aircraft brake fluids
Amines
Ketones
Low molecular weight esters and ethers



Compound Data Sheet
Parker O-Ring Division United States

REPORT DATA

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	ASTM D2000 M7HK 914 A1-11 B38 EF31 E088 <u>Pass / Fail Limits</u>	V1411-90 <u>Slab Results</u>
<u>Basic Physical Properties</u>		
Hardness	90 +/- 5	89
Tensile Strength, psi min	2031	2425
Elongation, % min	100	142
100% Modulus, Mpa	Not required	1643
Specific Gravity	Not required	1.84
<u>A1-11 Heat Aging, 70 HRS @ 275°C</u>		
Hardness Change, pts	-5 to +10	+3
Tensile Change, % max	-40	-24
Elongation Change, % max	-20	-15
<u>B38 Compression Set,</u> <u>22 HRS @ 200°C</u>		
% of Original Deflection, max	20	10
<u>EF31, ASTM Ref. Fuel C,</u> <u>70 HRS @ 23°C</u>		
Hardness Change, pts	+/-5	-1
Tensile Change, % max	-25	-13
Elongation Change, % max	-20	-11
Volume Change, %	0 to +10	+2
<u>E088, Fluid Resistance, Stauffer 7700,</u> <u>70 HRS @ 200°C</u>		
Hardness Change, pts	-15 to +5	-11
Tensile Change, % max	-40	-11
Elongation Change, % max	-20	-13
Volume Change, % max	+25	+25
<u>Basic Oil Immersion, IRM 903 Oil,</u> <u>70 HRS @ 150°C</u>		
volume change, max	+10	+3
<u>Heat Aging, 70 HRS @ 250°C</u>		
Hardness Change, pts	+/-15	+2
Tensile Change, %	+/-30	-12
Elongation Change, % max	-50	-14