



MATERIAL REPORT

REPORT NUMBER: KK2191
DATE: 08/24/93

TITLE: Evaluation of Parker Compound V1164-75 to MIL-R-83248C
Type 1, Class 1 Specifications

PURPOSE: To determine if V1164-75 meets the requirements.

CONCLUSION: Compound V1164-75 meets the specification requirements.

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



REPORT DATA

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<u>ORIGINAL PHYSICAL PROPERTIES</u>	<u>Specification</u>	V1164-75 2-214 <u>B/N 20003633</u>
Hardness, Shore A, pts.	75 ± 5	75
Tensile Strength, psi. min.	1400	1694
Elongation, % min.	125	229
Specific Gravity	As Determined	1.84
Aromatic Fuel Resistance:		
<u>Fuel B (70 h @ 73°F), ASTM D471</u>		
Hardness Change	-5 to +5	-3
Tensile Change, %, max	-20	-16.4
Elongation Change, %, max	-20	-17.9
Volume Change, %	0 to +5	+1.7
Synthetic Lubricant Resistance:		
<u>ARM 200, (70 h @ 392°F), ASTM D471</u>		
Hardness Change	-15 to 0	-15
Tensile Change, %, max	-35	-14.3
Elongation Change, %, max	-20	+8.7
Volume Change, %	+1 to +25	+17.4
Compression Set:		
<u>ARM 200, (70 h @ 392°F), ASTM D395 Method B</u>		
Percent of Original Deflection, %, max		
Under 0.110 inch	30	
Over 0.110 inch	10	1.5
Dry Heat Resistance:		
<u>(70 h @ 518°F), ASTM D573</u>		
Hardness Change	-5 to +10	-1
Tensile Change, %, max	-35	-16.6
Elongation Change, %, max	-15	-2.6
Weight Loss, %, max	10	1.9
Compression Set:		
<u>(22 h @ 392°F), ASTM D395 Method B</u>		
Percent of Original Deflection, %, max		
Under 0.110 inch	20	
Over 0.110 inch	15	7.4
Long Term Compression Set:		
<u>(336 H @ 392°F), ASTM D395 Method B</u>		
Percent of Original Deflection, %, max		
Under 0.110 inch	45	
Over 0.110 inch	40	31.4



Compound Data Sheet
Parker O-Ring Division United States

Low Temperature Resistance, ASTM D1329
Temperature Retraction, TR, point max

-15°C(+5°F)

-17°C(+1°F)

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