



MATERIAL REPORT

REPORT NUMBER: KK2205
DATE: 8/22/95

TITLE: Evaluation of Parker Compound N1231-80
PURPOSE: To obtain general information.

Recommended temperature limits: -25⁰F to 300/325⁰F

Recommended For

Explosive Decompression Resistance
Petroleum based hydraulic oil, motor oil, transmission fluid,
grease
R134a
Water/glycol/steam
HFA, HFB, and HFC fluids
Ozone, aging, and weather resistance

Not Recommended For

Polar solvents (ketones and esters)
Strong acids
Chlorinated hydrocarbons
Auto and aircraft brake fluids



REPORT DATA

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<u>Original Physical Properties</u>	N1231-80 <u>Results</u>
Hardness, Shore A, pts, 2	81
Tensile, Kg/cm, 2, min.	240
Elongation, %, min.	297
<u>Heat Aging</u>	
<u>70 Hrs. @ 150°C (302°F)</u>	
Hardness, Change, pts.	+4
Tensile, Change, %, max	-8.5
Elongation, Change, %	-20.2
<u>Compression Set</u>	
<u>70 Hrs. @ 150°C (302°F)</u>	
% of Original Deflection, max.	27.1
<u>ASTM Oil #1</u>	
<u>70 Hrs. @ 150°C (302°F)</u>	
Hardness, Change, pts	+3
Tensile, Change, %, max	+3.8
Elongation, Change, %, max	-7.1
Volume, Change, %	-1.3
<u>Sunisco 5GS Oil</u>	
<u>70 hrs. @ 150°C (302°F)</u>	
Hardness, Change, pts	-2
Tensile, Change, %, max	-1.8
Elongation, Change, %, max	-5.1
Volume, Change, %	+7.5
<u>ND8 Oil</u>	
<u>70 hrs. @ 150°C (302°F)</u>	
Hardness, Change, pts	+2
Tensile, Change, %, max	+6.1
Elongation, Change, %, max	-20.2
Volume, Change, %	-0.2
<u>Heat Age</u>	
<u>560 hrs. @ 120°C</u>	
Hardness, Change, pts	+4
Tensile, Change, %	+8.7
Elongation, %	-14.6



Compound Data Sheet
Parker O-Ring Division United States

Heat Age	N1231-80
<u>560 hrs. @ 150°C</u>	<u>Result</u>
Hardness, Change, pts	+9
Tensile, Change, %	+4.1
Elongation, %	-45.5
Heat Age	
<u>1000 hrs. @ 120°C</u>	
Hardness, Change, pts	+6
Tensile, Change, %	+2.1
Elongation, %	-17.7
Compression Set	
<u>70 hrs. @ 120°C</u>	28.9
% of Original Deflection	33.3
Compression Set	
<u>140 hrs. @ 120°C</u>	35.7
% of Original Deflection	38.9
Compression Set	
<u>140 hrs. @ 150°C</u>	71.4
% of Original Deflection	79.4
Compression Set	
<u>280 hrs. @ 120°C</u>	51.4
% of Original Deflection	55.6
Compression Set	
<u>280 hrs. @ 150°C</u>	84.3
% of Original Deflection	88.2
Compression Set	
<u>560 hrs. @ 120°C</u>	65.7
% of Original Deflection	67.6
Compression Set	
<u>560 hrs. @ 150°C</u>	
% of Original Deflection	91.4
Compression Set	
<u>1000 hrs. @ 120°C</u>	
% of Original Deflection	79