



MATERIAL REPORT

Date: 02/15/2008

TITLE: Evaluation of Parker HNBR compound N4007-95 for use in oilfield applications.

PURPOSE: To provide a general physical and chemical attribute profile of this compound.

CONCLUSION: Parker compound N4007-95 offers exceptional high pressure performance and excellent resistance to fluids commonly used in the industry.

Temperature Range: -25 to 300 / 325°F

Recommended For: Oils and greases made from petroleum or synthetic hydrocarbon base stock, weather and ozone, cold and hot water, alcohols, glycols, high fluid pressures, rapid gas decompression, R-134a refrigerant

Not Recommended For: Automotive brake fluid, commercial aircraft hydraulic fluid, concentrated strong acids, polar solvents (MEK, acetone, etc,) chlorinated hydrocarbon solvents

Parker O-Ring Division
2360 Palumbo Drive
Lexington, Kentucky 40509
(859) 269-2351

REPORT DATA

Date: 02/15/2008
Batch No. 60008217
Compound: N4007-95

<u>Original Physical Properties</u>	<u>ASTM Test Method</u>	<u>Results (Platen)</u>
Hardness, Shore A	D2240	91
Tensile Strength, min, psi	D412	5012
Elongation at Break, %	D412	196
Modulus @ 100% Elongation, psi	D412	2625
Specific Gravity	D297	1.26
 <u>Compression Set</u>		
<u>70 Hrs. @ 302° F</u>		
% of Original Deflection, Max	D395 Method B	35%
 <u>Dry Heat Resistance</u>		
<u>70 Hrs. @ 302° F</u>		
Hardness Change, pts.	D573	+4
Tensile Strength Change, %	D573	-21
Elongation Change, %	D573	-38
 <u>Distilled Water</u>		
<u>70 Hrs. @ 212° F</u>		
Hardness Change, pts.	D471	-1
Tensile Strength Change, %	D471	-1
Elongation Change, %	D471	+3
Volume Change, %	D471	+5
 <u>Diesel Fuel, #2 Low Sulfur</u>		
<u>70 Hrs. @ 212° F</u>		
Hardness Change, pts.	D471	-15
Tensile Strength Change, %	D471	-53
Elongation Change, %	D471	-19
Volume Change, %	D471	+23
 <u>Methanol</u>		
<u>70 Hrs. @ 72° F</u>		
Hardness Change, pts.	D471	-7
Tensile Strength Change, %	D471	-32
Elongation Change, %	D471	-11
Volume Change, %	D471	+11
 <u>Erifon 818</u>		
<u>70 Hrs. @ 158° F</u>		
Hardness Change, pts.	D471	0
Tensile Strength Change, %	D471	-5
Elongation Change, %	D471	+3
Volume Change, %	D471	+3
 <u>Barold ZnBR</u>		
<u>70 Hrs. @ 212° F</u>		
Hardness Change, pts.	D471	+7
Tensile Strength Change, %	D471	+21

Elongation Change, %	D471	-57
Volume Change, %	D471	+9
<u>Low-Temp. Resistance Method D1329</u>		
TR-10 °C	D1329	-21
<u>Explosive Decompression</u>		
NACE TM0297-97	Rating	1 – No Damage

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