



COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division, North America

MATERIAL REPORT

Report Number: 87005

Test Date: 5/30/2012

Title: Evaluation of Parker Compound S0604-70

Elastomer Type: Silicone (VMQ, PVMQ)

Purpose: Testing to AMS3357

Specification: AMS3357

Color: Rust

Recommended Temperature Range: -65°F to 450°F

Recommended For: Animal, Vegetable oil, grease, high molecular weight chlorinated aromatic hydrocarbons (including flame resistant insulators, and coolant for transformers), moderate weather resistance, diluted salt solutions, and ozone.

Not Recommended For: Superheated water/steam over 250°F, acids and alkalis, low molecular weight chlorinated hydrocarbons, hydrocarbon based fuels, aromatic hydrocarbons (benzene, toluene), and low molecular weight silicone oils.

Additional Approvals: AMS 3304
AMS 3357
MIL-G-21569 Class 2
A-A-59588 Class 2a, 2b, grade 70
UL Approval

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as a felony under federal law."*

<u>Original Physical Properties</u>	<u>Test Method</u>	<u>Spec Limits</u>	<u>Results</u>
Hardness, Shore A, pts	ASTM D2240	70 ± 5	70
Tensile Strength, psi, Min	ASTM D412	800	1214
Ultimate Elongation, % Min	ASTM D412	150	190
Tensile Stress at 50% Elongation, Min	ASTM D412	200	311
Specific Gravity	ASTM D297	1.43 ± 0.03	1.41
<u>Compression Set</u>			
<u>22 hrs @ 175°C (347°F)</u>			
Percent of Original Deflect, Max	ASTM D395 Method B	35	15
<u>Dry Heat Resistance</u>			
<u>22 hrs @ 225°C (437°F)</u>			
Hardness Change, pts.	ASTM D573	-5 to +10	+2
Tensile Strength Change, %		-15	-1
Elongation Change, %		-25	-12
Bend (flat)		No cracking	No Cracking
<u>Fluid Immersion</u>			
<u>ASTM D471</u>			
<u>IRM 901, 70 hrs @ 175°C (347°F)</u>			
Hardness Change, Shore A, pts.		-10 to +5	-4
Tensile Strength Change, %		-20	-7
Ultimate Elongation Change, %		-15	-15
Volume Change		0 to +15	+4
Decomposition		None	None
Surface Tackiness		None	None
<u>Tear Strength, Die B</u>			
<u>ASTM D624</u>			
Pounds force per inch, min		60	84
<u>Low Temp Brittleness</u>			
<u>ASTM D2137</u>			
Nonbrittle after 3 min @ -65°C (-85°F)		Pass	Pass