



## MATERIAL REPORT

Date:6/8/2010

**TITLE:** Evaluation of Parker silicone compound SM355-75 to the qualification requirements of AMS 7267.

**PURPOSE:** To qualify this material to this specification.

**CONCLUSION:** Parker compound SM355-75 meets the qualification requirements of AMS 7267.

**Temperature Range:** -60 to 450°F

**Recommended For:** Hot air, dilute acids, bases, weather and ozone, cold and hot water, alcohols, glycols.

**Not Recommended For:** Oils and greases made from petroleum or synthetic hydrocarbon base stock, aromatic hydrocarbon fuels and solvents, aliphatic solvents, chlorinated hydrocarbon solvents, dynamic applications.

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(859) 269-2351

**REPORT DATA**

Date: 6/8/2010

Batch No.: 0031003092

Compound: SM355-75

<u>Original Physical Properties</u>	<u>ASTM Test Method</u>	<u>Pass / Fail Limit</u>	<u>Results (AS568-214)</u>
Hardness, Shore A	D2240	75 +/- 5	75
Tensile Strength, psi min	D1414	650	791
Elongation at Break, % min	D1414	125	189
Specific Gravity	D297	Report	1.34
Corrosion	D1414	Nil	Nil

**Dry Heat Resistance****70 Hrs. @ 250° C**

Hardness Change, pts.	D573	-5 to +10	+4
Tensile Strength Change, % max	D573	-30	-30
Elongation Change, % max	D573	-45	-35

**Compression Set****22 Hrs. @ 225° C**

% of Original Deflection, max	D395 Method B	70	
1.68 to 2.79 mm, inclusive		60	32
Over 2.79 mm			

**Fluid Immersion, IRM901 Oil****70 Hrs. @ 175° C**

Hardness Change, pts.	D471	-10 to +5	-4
Tensile Strength Change, % max	D471	-30	-20
Elongation Change, % max	D471	-30	-21
Volume Change, %	D471	0 to +15	+8

**Low Temperature Resistance**

TR-10 point, °C, max	D1329	-42	-43
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	<u>ASTM Test Method</u>	<u>Pass / Fail Limit</u>	<u>Results (platen)</u>
<b><u>Compression Deflection at 20% Deflection</u></b>			
At 20 to 30° C, psi min	D575	200	331
At 250° C, psi min	D575	150	237

**Polymer Reversion (ARDL)**

Original Hardness, Shore A		75 +/- 5	77
Hardness Change, Shore A max	AMS 7267 4.5.2	-10	-1

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