

SI700R50 Datasheet

High Temp Orange Silicone 70A



Overview

SI700R50 is an 70 shore A silicone offering improved high temperature performance at a competitive price. It has excellent resistance to thermal degradation & compression set. Compare to Parker S0604-70 and S1224-70

Features & Benefits

- High temperature resistance
- Low compression set
- Exceptional environmental resistance (O₂, O₃, & UV)
- Fungal resistant

Service Temperature

• -54°C to 260°C (-65°F to 500F)

Specification

 ASTM D2000 M5GE706 A19 B37 E016 E036

Test Data

Table 1. Physical Properties			
Test	Requirements	Results	
Color	Orange	Orange	
Hardness, Shore A	70+/-5	69	
Tensile Strength, psi (MPa)	870 min	943 (6.5)	
Elongation	150% min	223%	
Specific Gravity, g/cm ³		1.18	



Table 2. A19 - Heat Aging - 70 hrs at 225°C			
Test (Change)	Requirements	Results	
Hardness, Shore A	+10 max	+4	
Tensile Strength, %	-25 max	+1	
Elongation, %	-30 max	-4	

Table 3. B37 – Compression Set – 22 hrs at			
175°C			
Test (Change)	Requirements	Results	
Permanent Set. %	25 max	18	

Resistance – 70 hrs at 150°C			
Test (Change)	Requirements	Results	
Hardness, Shore A	-15 to 0	-5	
Tensile Strength, %	-20 max	-12	
Elongation, %	-20 max	0	
Volume, %	0 to +10	+2	

Table 5. E036 – ASTM Oil #3 (903) Oil Resistance – 70 hrs at 150°C			
Test (Change)	Requirements	Results	
Hardness, Shore A	-30 max	-17	
Volume, %	+60 max	+13	

Looking for specific chemical compatibilities or desire more material information? Please Contact Us!

