

## **Solid Silicone Rubber - THT** **High Temperature Silicone Rubber Profiles**

**Grades** GP40THT GP50THT GP60THT GP70THT

**Temperature Range** 60°C (- 76°F) to 300°C (572°F) and up to 315°C (599°F) intermittent short term

### **Specifications**

Our colour range contains only ingredients approved and listed within the American Food and Drugs Administration (FDA) 21 CFR 177-2600.

These products meet the flammability requirements of FAR 25/JAR 25/CS 25 Appendix F, part 1, (a)(1)(iv) and (a)(1)(v) horizontal flammability tests and Automotive Standard PART 571FMVSS302.

### **Environment Resistance**

Silicone rubber products have an excellent resistance to ozone, oxidation, ultraviolet light, corona discharge, cosmic radiation, ionising radiation and weathering in general.

### **Availability**

Supplied in continuous roll lengths  
Pressure sensitive adhesive backing.  
Full range of standard colours.  
Capability to colour match.

### **General Characteristics**

Test	Result	Standard
Brittle point	-80°C (-112°F)	ASTM D746
Limiting Oxygen Index	24.0%	BS 2782 Part 1
Thermal Conductivity	0.24 W.m <sup>-1</sup> .K <sup>-1</sup>	VDE 0304
Radiation Resistance	>10 <sup>5</sup> Grays (10 <sup>7</sup> Rads) typical	
Dielectric Strength	23 kV.mm <sup>-1</sup>	VDE 0303
Dielectric Constant	2.9	VDE 0303
Dissipation Factor	3x10 <sup>-4</sup>	VDE 0303
Volume Resistivity	3x10 <sup>15</sup> Ω.cm	VDE 0303

### **Typical Applications**

Automotive, Domestic & Commercial, Catering, Construction, Electronics, Energy, Food & Beverage, Heating and Ventilation (HVAC), Industrial, Lighting, Marine.

## Solid Silicone Sheet - THT High Temperature Silicone Profile

### Mechanical Properties

Property	Units	GP40THT		GP50THT		GP60THT		GP70THT		Test Method
		Spec Limits	Typical Value	Spec Limits	Typical Value	Spec Limits	Typical Value	Spec Limits	Typical Value	
Hardness	Shore A	40±5	44	50±5	54	60±5	64	70±5	70	ASTM D2240 DIN ISO 7619-1
Tensile Strength	MPa	7.0 min	7.1	7.5 min	8.2	8.5 min	9.4	9.0 min	10.7	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1
	Psi	1015 min	1030	1088 min	1189	1233 min	1363	1305 min	1552	
Elongation to Failure	%	300 min	396	300 min	387	300 min	362	280 min	332	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1
Tear Strength	N/mm	12.0 min	15.3	15.0 min	17.7	18.0 min	22.1	18.0 min	19.3	ASTM D624 die B
	Lb./in.	68.5 min	87.4	85.7 min	101.1	102.8 min	126.2	102.8 min	110.2	
Compression Set 24 Hours @ 150°C	%	35 max	13	30 max	11	30 max	11	30 max	10	BS 903 pt A6 type B DIN/ISO 815 type B
Compression Set 22 Hours @ 300°C	%	35 max	13	30 max	10	30 max	10	30 max	10	ASTM D395 method B Type 2

### Extra Information

In-house capabilities for extensive industry specific testing available on request.