

# SILEX

## SILICONE S0



Certificate No. 0372

### Solid Silicone Sheet – GP – Issue Date 01.09.18

**Grades** GP30 GP40 GP50 GP60 GP70 GP80

**Temperature Range** - 60°C (- 76°F) to 230°C (446°F) and up to 250°C (482°F) intermittent

### Specifications

Our colour range has been tested to and is in accordance with the American Food and Drugs Administration (FDA) 21 CFR 177-2600, BFR XV Empfehlung and colour bleed test according to BFR Empfehlung part B 11 & Directive EC 1935/2004.

Translucent, Blue, White, Red and Black have been approved by WRAS (Water Regulations Advisory Service) for use with potable water at temperatures up to 85°C (185°F). The listing number is 1310541.

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. EU 10/2011 does not apply to silicone.

### 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  
Widths of 1200mm (standard), 1500mm and 1800mm.  
Pressure sensitive adhesive backing.  
Punched and water Jet gaskets.  
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.

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## SILEX Limited

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## Solid Silicone Sheet - GP

### Mechanical Properties

		<b>GP30</b>	<b>GP40</b>	<b>GP50</b>	<b>GP60</b>	<b>GP70</b>	<b>GP80</b>	
<b>Property</b>	Units	Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	<b>Test Method</b>
Hardness	Shore A ± 5	30	40	50	60	70	80	ASTM D2240 DIN ISO 7619-1
Tensile Strength	MPa (Psi)	8.0 (1150)	9.0 (1300)	9.0 (1300)	10.0 (1450)	10.0 (1450)	7.0 (1015)	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1
Elongation to Failure	%	500	625	450	400	320	215	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1
Tear Strength	N/mm (Lb./in.)	16.0 (91)	23 (130)	18 (100)	22 (125)	20 (115)	17 (88.5)	ASTM D624 die B
Compression Set 24 Hours @ 150°C	%	23	25	15	13	9	18	BS 903 pt A6 type B DIN/ISO 815 type B
Compression Set 22 Hours @ 300°C	%	20	22	16	10	10	16	ASTM D395 method B Type 2

### Extra Information

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

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