



## SILICONE RUBBER SHEET (GENERAL PURPOSE, SOLID)

### MATERIAL SPECIFICATION SHEET

#### Manufacturer

Silex Silicones Limited

#### Temperature Range

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

#### Specifications

Colour Range: White, Black, Blue, Red, Translucent. Colour bleed test according to BFR Empfehlung part B 11 & Directive EC 1935/2004

Fully compliant to FDA standard 177.2600 and EC 1935/2004. General Purpose Silicone sheets are suitable for applications requiring direct food contact.

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.

#### 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



The company's products are used for a multiplicity of purposes and as the company has no control over the method of their applications or use, the company excludes all conditions or warranties, expressed or implied by statute or otherwise, as to their products and/or their fitness for any particular purpose. Any technical co-operation between the company and the customer is given for customers assistance only and without liability on the part of the company

**Environment Resistance**

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

**Typical Applications**

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

**Mechanical Properties**

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

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



ISO 9001:2015 Q93057 ISO 14001:2015 EMS 505718

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