

Solid Silicone Sheet - GP

<u>Grades</u>	GP30	GP40	GP50	GP60	GP70	GP80
<u>Temperature Range</u>	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.

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 ⁻¹ .K ⁻¹	VDE 0304
Radiation Resistance	>10 ⁵ Grays (10 ⁷ Rads) typical	
Dielectric Strength	23 kV.mm ⁻¹	VDE 0303
Dielectric Constant	2.9	VDE 0303
Dissipation Factor	3x10 ⁻⁴	VDE 0303
Volume Resistivity	3x10 ¹⁵ 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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Mechanical Properties

Property	Units	GP30		GP40		GP50		GP60		GP70		GP80		Test Method
		Spec Limits	Typical Value	Spec Limits	Typical Value	Spec Limits	Typical Value	Spec Limits	Typical Value	Spec Limits	Typical Value	Spec Limits	Typical Value	
Hardness	Shore A	30±5	30	40±5	40	50±5	54	60±5	62	70±5	70	80±5	79	ASTM D2240 DIN ISO 7619-1
Tensile Strength	MPa Psi	6.0 min 870 min	7.9 1146	6.0 min 870 min	7.0 1015	6.5 min 942 min	8.0 1160	7.0 min 1015 min	7.9 1146	7.0 min 1015 min	7.6 1150	6.0 min 870 min	7.2 1044	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1
Elongation to Failure	%	350 min	500	300 min	450	280 min	370	280 min	340	200 min	300	180 min	216	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1
Tear Strength	N/mm Lb./in.	8.5min 48.5 min	16.0 91.0	8.5 min 48.5 min	10.2 58.3	10.0 min 57.0 min	12.8 73.1	12.5 min 71.4 min	14.2 81.1	12.5 min 71.4 min	14.4 82.2	12.5 min 71.4 min	15.5 88.5	ASTM D624 die B
Compression Set 24 Hours @ 150°C	%	35 max	23	35 max	25	30 max	15	30 max	13	30 max	9	30 max	18	BS 903 pt A6 type B DIN/ISO 815 type B
Compression Set 22 Hours @ 300°C	%	35 max	20	35max	22	30 max	16	30 max	10	30 max	10	30 max	16	ASTM D395 method B Type 2

Extra Information

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