

Solid Silicone Elastomer Sheeting

Grades

kSil™GP30 kSil™GP40 kSil™GP50
 kSil™GP60 kSil™GP70 kSil™GP80

Specifications

Our colour range has been tested to and is in compliance 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.

Availability

Mouldings



Sheeting



Gaskets



Cables



Extrusions



Compound



Tubing



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

Temperature Range

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

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.

Solid Silicone Elastomer Sheeting

Mechanical Properties

		kSil™GP30	kSil™GP40	kSil™GP50	kSil™GP60	kSil™GP70	kSil™GP80	
Property	Units	Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	Test Method
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°F	%	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.