

# Solid Silicone Elastomer Sheeting

[GP]

## 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 0806508.

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 <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

This information and our technical advice, whether verbal, in writing or by way of trials, is given in good faith but without warranty. This also applies where proprietary rights are involved. Our advice does not release you from the obligations to check its validity and to test our products as to their suitability for the intended use. The storage, application and use of our products are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with our General Conditions of Sale. The information contained within this data sheet is subject to change without notice.

## 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

Property	Units	kSil™GP30		kSil™GP40		kSil™GP50		kSil™GP60		kSil™GP70		kSil™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.	8.5 min. 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°F	%	35 max.	20	35 max.	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.