

# Solid Silicone Elastomer Extrusions & Mouldings

## Grades

suraSil™ GP30    suraSil™ GP40    suraSil™ GP50

suraSil™ GP60    suraSil™ GP70    suraSil™ 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



## 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

- Tubing, cord, section, strip and profiles.
- Pressure sensitive adhesive backing.
- Joined rings and 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, HVAC, Industrial, Lighting, Marine, Oil & Gas

# Solid Silicone Elastomer Sheeting Extrusions & Mouldings

## Mechanical Properties

Property	Units	suraSil™ GP30	suraSil™ GP40	suraSil™ GP50	suraSil™ GP60	suraSil™ GP70	suraSil™ GP80	Test Method
		Typical Value						
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)	10.5 (1525)	11.5 (1670)	11.0 (1595)	10.0 (1450)	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1
Elongation to Failure	%	500	625	550	500	500	450	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1
Tear Strength	N/mm (lb/ in.)	16.0 (91)	23 (130)	25 (143)	26 (148)	30 (172)	29 (166)	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.

\*All testing performed on translucent samples