

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:

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



Rolls



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.
- Standard colours: translucent, White, Black, Blue, RIO, Grey, Green
- 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, HVAC, Industrial,
 Lighting, Marine, Oil & Gas

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Mechanical Properties

Property	Units	suraSil™ GP30	suraSil™ GP40	suraSil™ GP50	suraSil™ GP60	suraSil™ GP70	suraSil™ GP80	Test Method
		Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	
Hardness	Shore A ± 5	30	40	50	60	70	80	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 2
Elongation to Failure	%	500	625	550	500	500	450	ISO 37 type 2
Tear Strength	N/mm (lb/in.)	16 (91)	23 (130)	25 (143)	26 (148)	30 (172)	29 (166)	ASTM D624 die B
Compression Set 24 hours @ 150°C	%	23	21	15	13	16	18	DIN/ISO 815 type B

Extra Information

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

*All testing performed on translucent samples