

Technical Data Sheet

Silicone Rubber Sponge General Purpose Grade



Material

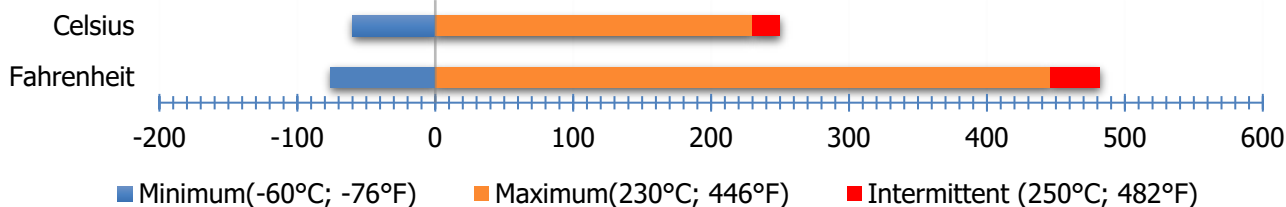
Closed Cell Silicone Sponge



Available Grades

SIL10, SIL16, SIL20, SIL24, SIL33

Temperature Range



General Information

The material should not be compressed by more than 50% of its original thickness, as the cells may break under such compression. The maximum compression recommended is 30% of initial thickness. Sealing with less than 30% compression helps reduce compression set and promotes product longevity.

The density range in white has been approved by the WRAS (Water Regulations Advisory Service) for use in contact with potable water at temperatures up to 85°C (185°F).

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 test and Automotive Standard PART 571FMVSS302

The sponge is closed cell with low water absorption and dust ingress protection up to IP65, subject to design.

Environmental Resistance

Silicone rubber products have an excellent resistance to:

- Ozone
- Oxidation
- Ultraviolet light
- Corona discharge
- Cosmic radiation
- Ionising radiation
- Weathering in general

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SILEX SILICONES LTD

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E-Mail: sales@silex.co.uk, Website: www.silex.co.uk, Registered company number: 1951973. Place of registration: England & Wales. Directors: K Soudah, S.J. Fearn, P Millson, Ray Soudah

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Availability Format

SHEETING

- Supplied in rolls or individual sheets
- Widths up to 1000mm
- Pressure sensitive adhesive backing
- Punched/Water jet-gaskets
- Full range of standard colours
- Capability to colour match

Typical Applications

- Automotive
- Electronics
- Energy
- Construction
- Heating and Ventilation (HVAC)
- Industrial
- Insulations
- Lighting and Marine

Accreditations

- FAR 25/JAR 25/CS 25 Appendix F, Part 1, (a)(1)(iv)(a)(1)(v) horizontal flammability test
- If tested would meet UL94HB
- Automotive Standard PART 571FMVSS302
- REACH compliant and ROSH compliant

General Characteristics

Test	Result	Standard
Brittle Point	-80°C (-112 °F)	ASTM D746
Limiting Oxygen Index	24.0 %	BS 2782 Part 1
Thermal Conductivity	$6,4 \times 10^{-2} \text{W.m}^{-1}.\text{K}^{-1}$	BS2782 Part 2
Radiation Resistance	$>10^5$ Grays (10^7 Rads) typical	

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Mechanical Properties

Sheeting		SIL10	SIL16	SIL20	SIL24	SIL27	SIL33	
Property	Units	Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	Typical Value	Test Method
Density *	kg.m ³ lb.ft ³	200 12.5	250 15.6	320 20	400 25	460 28.7	550 34.3	BSENISO 845 ASTM D3574
Hardness **	Shore OO Shore A	35 ±5 <5	42 ±5 5	55 ±5 15	65 ±5 17	70 ±5 24	80 ±5 30	ASTM D2240
Compression Stress 40% Strain ***	kPa PSI	50 4.6	90 6.4	120 8.3	165 11.9	230 17.4	470 34.8	BSENISO 3386 Part 1,2 ASTM D1056
Tensile Strenght	MPa PSI	0.6 87	0.6 87	0.75 108	0.75 108	1.5 217	2.0 290	BSENISO 1798 ASTM D412
Elongation to failure	%	140	145	120	120	130	130	BSENISO 1798 ASTM D412
Compression Set 50% Compression 24hrs Recovery, 22 hrs 70°C (158°F)	%	15.0	12.0	12.0	10.0	10.0	9.5	BSENISO 1856
Compression Set 50% Compression 24hrs Recovery, 22 hrs 100°C	%	18.0	14.5	14.0	12.0	12.5	12.0	BSENISO 1856
Water Absorption	%	<5	<5	<5	<5	<5	2	ASTM D1056

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Additional Information

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