

Technical Data Sheet

Silicone Rubber Sponge General Purpose Grade



Material

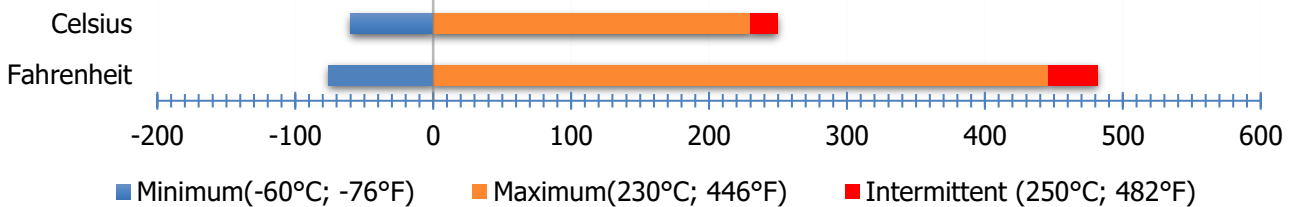
Closed Cell Silicone Sponge



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 LTD

Silex Ltd, Unit 10, Oakhanger Farm Business Park, Oakhanger, Bordon, Hampshire, GU35 9JA. Tel 00 44 1420 470360, Fax 00 44 1420 472802
E-Mail: sales@silex.co.uk, Website: www.silex.co.uk, Registered company number: 1951973. Place of registration: England & Wales.

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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 571 FMVSS 302
- REACH compliant and ROSH compliant
- Capable of meeting ASTM D1056 2A2; ASTM 6576 Grades B & C

General Characteristics

Test	Result	Standard
Brittle Point	-80°C (-112 °F)	ASTM D746
Limiting Oxygen Index	24.0 %	BS 2782 Part 1
Thermal Conductivity	0.070 W.0.1.K.1 / 6,4x10 ⁻² W.m ⁻¹ .K ⁻¹	BS 874 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 * (Measured on 25mm cord sample)	kg.m ³ lb.ft ³	200 12.5	250 15.6	320 20	400 25	460 28.7	550 34.3	ISO 845 (ASTM D3574)
Hardness **	Shore OO Shore A	35 ±5 <5	47 ±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	75 5.0	120 8.3	165 11.9	230 17.4	470 34.8	ISO 3386 Part 1,2 ASTM D1056
Tensile Strength	MPa PSI	0.6 87	0.6 87	0.75 108	0.75 108	1.5 217	2.0 290	ISO 1798 ASTM D412
Elongation to failure	%	140	150	120	120	130	130	ISO 1798 ASTM D412
Compression Set 50% Compression 24hrs Recovery, 22 hrs 70°C (158°F)	%	15.0	2	12.0	10.0	10.0	9.5	ISO 1856
Compression Set 50% Compression 24hrs Recovery, 22 hrs 100°C	%	18.0	10	14.0	12.0	12.5	12.0	ASTM D1056
Water Absorption	%	<5	0.2	<5	<5	<5	2	ASTM D1056

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Additional Information

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