

# Technical Data Sheet

Silicone Rubber Sponge FDA-Compliant



## Material

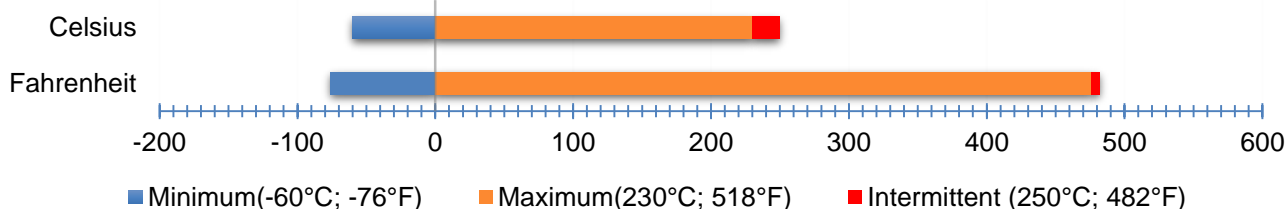
Mainly closed cell Silicone  
Sponge



## Available Grades

SIL15 FDA

## 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.

Our SIL15 FDA range is in compliance with the American Food and Drugs Administration (FDA) 21 CFR 177-2600 & 175.300 it is as well compliant to German BfR Recommendation XV on silicone Food Contact.

EU1935/2004 compliant.

These products meet the flammability requirements of FAR 25/J AR 25/ CS25 Appendix F, Part 1, (a)(1)(v) horizontal flammability test and Automotive Standard PART 571FMVSS302.

Can be formulated to meet AMS and ASTM sponge specifications.

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

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**SILEX SILICONES LTD**

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E-Mail: [sales@silex.co.uk](mailto:sales@silex.co.uk), Website: [www.silex.co.uk](http://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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Silicone Rubber Sponge General Purpose Grade



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## Environmental Resistance

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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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## Availability Format

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Extruded only, for Sheetting see SIL20FDA

- Cord, section, strip, profiles
- Joined rings and gaskets
- Pressure sensitive adhesive backing
- Full range of standard colours
- Capability to colour match

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## Typical Applications

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- Automotive
- Electronics
- Energy
- Construction
- Heating and Ventilation (HVAC)
- Industrial
- Insulations
- Lighting and Marine
- High and Low temperature gaskets and seals
- Food sensitive and Food Processing
- Medical and Pharmaceutical

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## Mechanical Properties

Extrusions		SIL15	
Property	Units	Typical Value	Test Method
Density *	kg.m <sup>3</sup> lb.ft <sup>3</sup>	350 21.8	BSENISO 845 ASTM D3574
Hardness **	Shore OO Shore A	50-60 ±5 <7-10	ASTM D2240
Compression Stress 40% Strain ***	kPa PSI	78 11.3	BSENISO 3386 Part 1,2
Tensile Strenght	MPa PSI	0.45 65	BSENISO 1798 ASTM D412
Elongation to failure	%	140	BSENISO 1798 ASTM D412
Compression Set 50% Compression 24hrs Recovery, 22 hrs 70°C (158°F)	%	<1	BSENISO 1856
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## General Characteristics

Test	Result	Standard
Brittle Point	-80°C (-112 °F)	ASTM D746
Limiting Oxygen Index	24.0 %	BS 2782 Part 1
Thermal Conductivity	6.1x10 <sup>-2</sup> W.m <sup>-1</sup> .K <sup>-1</sup>	BS 874 Part 2
Radiation Resistance	>10 <sup>5</sup> Grays (10 <sup>7</sup> Rads) typical	

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## Accreditations

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- American Food and Drugs Administration (FDA) 21 CFR 177-2600
- FAR 25/JAR 25/CS 25 Appendix F, Part 1, (a)(1)(iv)(a)(1)(v) horizontal flammability test
- Automotive Standard PART 571FMVSS302
- EU 1935/2004 compliant

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## Additional Information

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- Platinum cured
- Smooth and dry surface
- Well finished edges

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