Technical Data Sheet

Silicone Rubber Sponge High Temperature (270°C)

SILEX LTD
SILICONE EXPERTS SINCE 1985

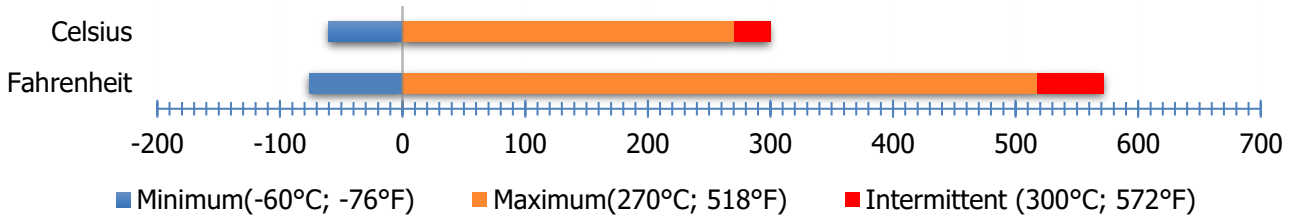
Material

Closed cell Silicone Sponge for high temperature applications

Available Grades

SIL10HT, SIL16HT, SIL20HT, SIL24HT, SIL33HT

Temperature Range



General Information

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

SILEX LTD
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Availability Format

EXTRUSIONS

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

Typical Applications

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

Mechanical Properties

Grades		SIL10HT	SIL16HT	SIL20HT	SIL24HT	SIL33HT	
Property	**Units**	**Typical Value**	**Typical Value**	**Typical Value**	**Typical Value**	**Typical Value**	**Test Method**
Density *	kg.m³ lb.ft³	219 13.7	263 16.4	310 19.3	387 24.2	579 36.2	BSENISO 845
Hardness **	Shore OO Shore A	19.1 ±5 1.9	51.3 ±5 9.7	57 ±5 11	63.1 ±5 12.8	86.2 ±5 35	ASTM D2240
Compression Stress 40% Strain ***	kPa PSI	32 4.6	84.2 12.2	115 16.6	121 17.6	428 62.1	BSENISO 33886 Part 1,2
Tensile Strenght	MPa PSI	0.23 33.4	0.44 63.8	0.4 58.0	0.39 56.6	1.26 182.8	BSENISO 1798 ASTM D412
Elongation to failure	%	400	148.9	140	142.9	144	BSENISO 1798
Compression Set 50% Compression 24hrs Recovery, 22 hrs 70°C (158°F)	%	10.0	0.6	1.2	1.0	4.3	BSENISO 1856
Compression Set 50% Compression 24hrs Recovery, 22 hrs 100°C (212°F)	%	13.8	3.5	4.9	4.0	6.9	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	$6{,}4x10^{-2}W.m^{-1}.K^{-1}$	35874 Part 2
Radiation Resistance	$>10^5$ Grays (10^7 Rads) typical	

Accreditations

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

Additional Information

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