

Technical Data Sheet

Silicone Rubber Sponge General Purpose Grade



Material

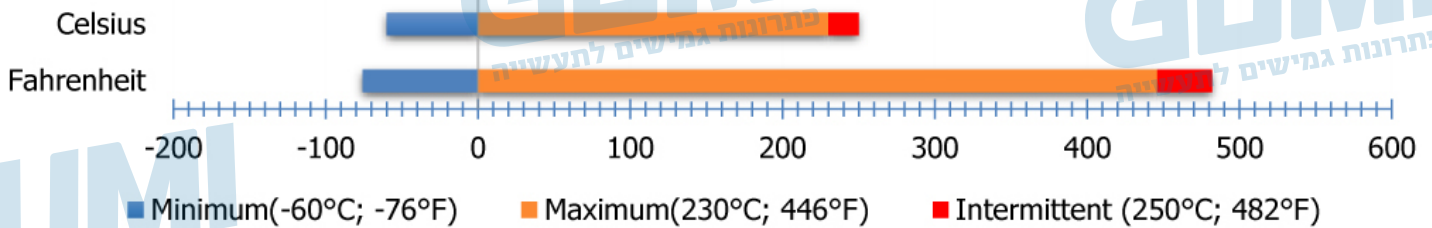
Closed Cell Silicone Sponge



Available Grades

SIL16, SIL24 AFS Grades

Temperature Range



General Information

These grades of cellular silicone elastomers have been specially formulated to meet the Ministry of Defence AFS 1682A Specification. They are particularly suited for use in high temperature seals and Gaskets.

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. These products should not be compressed by more than 50% as this will destroy the cell structure.

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

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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		SIL16AFS	SIL24AFS	
Property	Units	Typical Value	Typical Value	Test Method
Density *	kg.m ³ lb.ft ³	260 16.2	400 25	BSENISO 845
Compression Stress 40% Strain ***	kPa PSI	95 13.8	175 25.4	BSENISO 3386 Part 1,2 ASTM D1056
Tensile Strength	MPa PSI	1.3 188.6	1.7 246.6	BSENISO 1798
Elongation to failure	%	200	150	BSENISO 1798
Compression Set 25% Compression 27hrs, Recovery, 48 hrs 150°C (302°F)	%	5	6	BSENISO 1856
Compression Stress 40% strain Change after Heat Age 168 hours @ 150°C	kPa PSI	98 14.2	185 26.6	BSENISO 3386 part 1, 2
Compression Set (as above) Change after Heat Age for 168 hours @ 150° C	%	2	3	BSENISO 1856

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Additional Information



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