

Technical Data Sheet

Silicone Rubber Sponge High Temperature (270°C)



Material

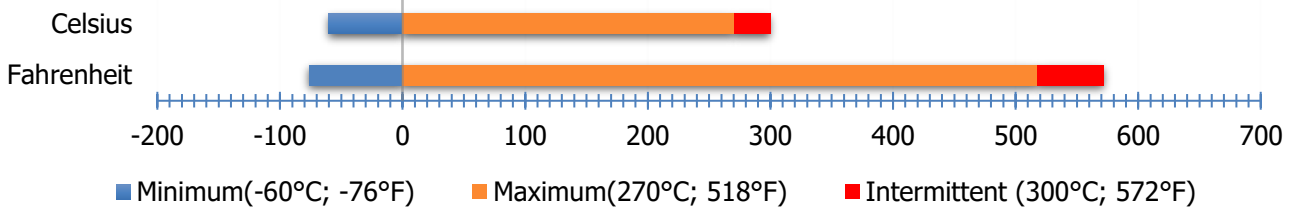
Closed cell Silicone Sponge for high temperature applications



Available Grades

SIL10HT, SIL16HT, 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

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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

Mechanical Properties

| Grades | | SIL10HT | SIL16HT | SIL24HT | SIL33HT | |
|--|--------------------|---------------|---------------|---------------|---------------|---|
| Property | Units | Typical Value | Typical Value | Typical Value | Typical Value | Test Method |
| Density * | kg.m ³ | 220 | 250 | 390 | 550 | BSENISO 845 ASTM D3574 |
| | lb.ft ³ | 14 | 16 | 24.0 | 34.3 | |
| Hardness ** | Shore OO | 25 | 42 | 63 | 86 | ASTM D2240 |
| | Shore A | 2 | 5 | 17 | 30 | |
| Compression Stress 40% Strain *** | kPa | 50 | 90 | 165 | 470 | BSENISO 33886 Part 1,2 ASTM D1056 |
| | PSI | 4.6 | 6,4 | 9.0 | 34.8 | |
| Tensile Strenght | MPa | 0.6 | 0.6 | 0.8 | 2 | BSENISO 1798 ASTM D412 |
| | PSI | 87 | 87 | 116 | 290 | |
| Elongation to failure | % | 140 | 145 | 120 | 130 | BSENISO 1798 ASTM D412 |
| Compression Set 50% Compression 24hrs Recovery, 22 hrs 70°C (158°F) | % | 10.0 | 1.0 | 1.0 | 4.0 | BSENISO 1856 |
| Compression Set 50% Compression 24hrs Recovery, 22 hrs 100°C (212°F) | % | 22.0 | 4.0 | 4.0 | 10.0 | ASTM D1056 |

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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 | BS2782 Part 1 |
| 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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