

Technical Data Sheet

Silicone Rubber Sheeting

High Temperature Solid



Material

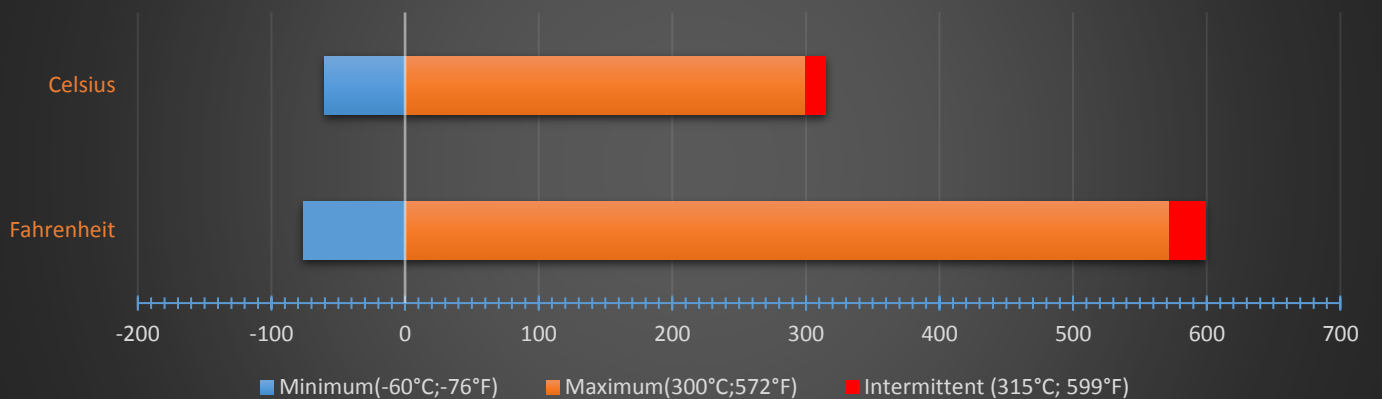
High Temperature Silicone Rubber for 300°C

Available Grades

GP60THT available from stock, GP40THT to GP80THT available on request

Temperature

Temperature Range



General Information

Our colour range contains only ingredients approved and listed within the American Food and Drugs Administration (FDA) 21 CFR 177-2600.

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 571MVSS302.

Environmental Resistance

Silicone rubber products have an excellent resistance to:

- ❖ Ozone
- ❖ Oxidation
- ❖ Ultraviolet light
- ❖ Corona discharge
- ❖ Cosmic radiation
- ❖ Ionising radiation
- ❖ Wheatering in general

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SILEX SILICONES LIMITED

Unit 10, Oakhanger Farm Business Park, Oakhanger, Hampshire, GU35 9JA, Tel 0044 1420 470 360, Fax 0044 472 802

E-Mail: info@silex.co.uk, Website: www.silex.co.uk, Registered in England No. 1951973

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Availability Format

- ✓ Supplied in continuous roll lengths
- ✓ Widths of 1000mm (standard)
- ✓ Other widths available on request
- ✓ Pressure sensitive adhesive backing
- ✓ Punched and Water jet gaskets
- ✓ Red Oxide and White from stock
- ✓ Capability to colour match
- ✓ Fabricated articles

Typical Applications

- ❖ Automotive
- ❖ Domestic & Commercial
- ❖ Catering
- ❖ Construction
- ❖ Electronics
- ❖ Energy
- ❖ Food & Beverage
- ❖ Heating and Ventilation (HVAC)
- ❖ Industrial
- ❖ Lighting
- ❖ Marine

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Mechanical Properties

| Property | Units | Typical Value | Typical Value | Typical Value | Typical Value | Typical Value | Test Method |
|-----------------------------------|-----------------|---------------|---------------|---------------|---------------|---------------|---|
| Hardness | Shore A ± 5 | 40 | 50 | 60 | 70 | 80 | ASTM D2240 DIN ISO 7619-1 |
| Tensile Strength | MPa (PSI) | 7 1015 | 8 1160 | 9 1305 | 10 1450 | 10 1450 | ISO 37 type 1 ASTM D412 die C DIN 53504 type S1 |
| Elongation to failure | % | 600 | 400 | 350 | 350 | 450 | ISO 37 type 1 ASTM D412 die C DIN 53504 type S1 |
| Tear Strength | N/mm (Lb./in.) | 15 86 | 18 102 | 22 125 | 19 109 | 29 166 | ASTM D624 die B |
| Compression set 24 hrs @ 150°C | % | 13 | 11 | 11 | 10 | 12 | BS 903 pt A6 type B DIN/ISO 815 type B |
| Compression set 22 hrs @ 300°C | % | 13 | 10 | 10 | 10 | 10 | ASTM D395 method B type 2 |

In-house capabilities for extensive industry specific testing available on request

General Characteristics

| Test | Result | Standard |
|-----------------------|---|----------------|
| Brittle Point | -80°C (-112 °F) | ASTM D746 |
| Limiting Oxygen Index | 24.0 % | BS 2782 Part 1 |
| Thermal Conductivity | 0.24 W.m ⁻¹ .K ⁻¹ | VDE 0304 |
| Radiation Resistance | >10 ⁵ Grays (10 ⁷ Rads) typical | |
| Dielectric Strength | 23 kV.mm ⁻¹ | VDE 0303 |
| Dielectric Constant | 2.9 | VDE 0303 |
| Dissipation Factor | 3x10 ⁻⁴ | VDE 0303 |
| Volume Resistivity | 3x10 ¹⁵ Ω.cm | VDE 0303 |

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Accreditations

- ❖ FDA
- ❖ FAR 25/JAR 25/CS 25 Appendix F, Part 1
- ❖ (a)(1)(iv) and (a)(1)(v) horizontal flammability test
- ❖ Automotive Standard PART 571MVSS302
- ❖ EU 1935/2004 compliant
- ❖ REACH compliant and RoHS compliant

Additional Information

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