



TECHNICAL DATA SHEET

High Temperature Cellular Silicone Elastomer – Extrusions & Sheeting

Grades: SE510 THT, SE515 THT, SE520 THT, SE524 THT, SE527 THT and SE533 THT

Temperature Range: -60°C to 270°C

AVAILABILITY

The SE range of cellular silicone elastomers are available as sheeting, profile extrusions, jointed rings, self-adhesive backed, strip and punchings. They are particularly suited to use in high temperature seals and gaskets, where a soft, easily deformed rubber is required. There is a full range of standard colours available and Silicone Engineering has the capability to colour match to customer requirements. Sheeting is available in standard rolls of width 1m; other widths can be produced upon request.

** Other specific sponge grades available include Flame retardant grades, SE515 & SE524 AFS1682, AMS3195, AMS3196 & BMS 1-60**

SPECIFICATIONS

This product meets the flammability requirements of FAR 25/JAR 25/CS 25 Appendix F, Part 1, (a)(1)(iv) and (a)(1)(v) horizontal flammability tests.

This material has been specially designed to withstand High Temperatures. Testing indicates that this material will display a useful life at temperatures as high as 280°C. The material will withstand short-term exposure to 300°C

The sponge is predominately-closed cell with low water absorption

GENERAL CHARACTERISTICS FOR SILICONE RUBBER

Brittle Point	-80°C	ASTM D746
Limiting Oxygen Index	23.2 %	BS 2872 Part 1
Thermal Conductivity (SE 515)	$6.4 \times 10^{-2} \text{ W.m}^{-1} \cdot \text{K}^{-1}$	BS 874 Part 2
Radiation Resistance	$>10^5$ Grays (10^7 Rads) typical	

Environmental Resistance

Silicone rubber products have an excellent resistance to ozone, oxidation, ultraviolet light, corona discharge, cosmic radiation, ionising radiation and weathering in general.

Silicone rubber products produce very low levels of toxic fume when burnt

Other grades of silicone rubber available from Silicone Engineering are:

- * General Purpose Grades
- * Cellular silicone Products
- * High Temperature Grades
- * High Tear Grades
- * Flame Retardant Grades
- * Low Combustion Hazard Grades

This wide range of grades and production capability in silicone rubber is only available from



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MECHANICAL PROPERTIES

Property	SE510 HT Specification Limits	SE515 HT Specification Limits	SE520 HT Specification Limits	SE524 HT Specification Limits	SE527 HT Specification Limits	SE533 HT Specification Limits	Test Method
*Density (kg.m ⁻³)	200±50	250±50	320±50	400±50	430±50	530±50	BSENISO 845
**Compression Stress (kPa) 40% strain	50±40	90±40	130±40	160±40	190±40	580±150	BSENISO 3386 Part 1,2
Compression Set (%) 22 hours @ 70°C	15 max	15 max	15 max	15 max	15 max	15 max	BSENISO 1856

*Density measured on 25 mm diameter cord sample. The density of samples of different sizes will be different from that stated here.

**Compression Stress measured on samples as defined in BSENISO 3386. The compressive stress on samples of different dimensions, especially thickness may vary from that quoted here.

For further information about physical properties for other sample sizes, please contact the technical department.