



## TECHNICAL DATA SHEET

### Low Combustion Hazard Cellular Silicone Elastomer – Extrusions & Sheeting

Grade: SE515 LCH

Temperature Range: -60°C to 230°C

#### AVAILABILITY

This cellular silicone elastomer is available as sheeting, profile extrusions, jointed rings, self-adhesive backed, strip and punchings. It has been developed for use in engineering applications where a soft, easily deformable rubber is required and public safety is a primary concern. There is a wide 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

These products meet the flammability requirements of FAR 25/JAR 25/CS 25 Appendix F, Part 1, (a)(1)(i), (a)(1)(ii) vertical and (a)(1)(iv), (a)(1)(v) horizontal flammability tests.

The sponge is predominately-closed cell with low water absorption

SE515LCH has been independently tested for determination of Smoke Index, Oxygen Index and the Toxicity Index,

Smoke Index = 15.09 DEF STAN 02 711 (NES 711 Cat. 2) PASS

Toxicity Index = 0.97 DEF STAN 02 713 (NES 713 Cat. 2) PASS

Oxygen Index = 28.8% BSENISO 4589-2. Vehicle Category II, BS 6853 Tables 7 & 8.

#### GENERAL CHARACTERISTICS FOR SILICONE RUBBER

Brittle Point	-80°C	ASTM D746
Thermal Conductivity	$6.4 \times 10^{-2} \text{ W.m}^{-1}.\text{K}^{-1}$	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	Units	SE515 LCH		Test Method
		Specification Limits	Typical Value	
*Density	kg.m <sup>-3</sup>	250±50	233	BSENISO 845
**Compression Stress 40% strain	kPa	90±40	120	BSENISO 3386 Part 1
Compression Set 50% compression 22 hours @ 70°C 24 hours recovery	%	15 max	1.3	BSENISO 1856

\*Density measured on 25 mm cord sample. Density of different sample dimensions will vary from this value.

\*\*Compression Stress measured on 25 mm thick sample. The compressive stress of the material increases with the density as the sample thickness is reduced.

For further Information about this material, please contact the Technical Department.