Flame Retardant Cellular Silicone Elastomer

Grades: SE510FR UL94V0 & SE515FR UL94V0

Availability

The FR range of cellular silicone elastomers is available as sheeting, profile extrusions, jointed rings, self-adhesive backed, strip and die-cut. They are particularly suited to use in high temperature seals and gaskets, where a soft easily deformable rubber is required and where public safety is critical.

Sheeting is available in standard rolls of width 1 metre and Length 10 metres; other widths or lengths can be produced on request. The scope of the UL approval for these products limits the minimum dimensions and colours that can be manufactured, for further information please contact P & P Technology Ltd.

Specification

These products have been specifically formulated for and hold approval to the flammability requirements of the UL94 V0 specification. The UL file number for these materials is E23 5077.

As V0 is the most demanding of the UL94 vertical burn tests, these grades may also be used in applications where V1 or V2 rating is required. These products meet the flammability requirements of FAR251JAR 25?CS 25 Appendix F, Part 1 (a)(1)(i), (a)(1)(ii) vertical and (a)(1)(iv), (a)(1)(v) horizontal flammability tests.

Property	SE510FR UL94 V0		SE515FR UL94 V0		Test Method
	Specification Limits	Typical Value	Specification Limits	Typical Value	
Density (kg/m3)	160±301* 360±60**	169 310	220±301* 400±60**	218 101	*25mm sample *3mm sample
Compression Stress (kpa) 40% strain	30 ± 20	14	70± 20	68	BSEINSO 3386 Part 1 25mm sample
Compression set 24 hours@ 70°C	20 Max.	12	15 Max.	10	BSEINSO 1856 Type A

Note

The density of the sponge varies with the thickness of the product. As the thickness decreases, the density increases; in addition, as the density increases, the stiffness of the product increases. For information on the apparent density of any specific thickness and the possible effects on performance, please contact Nolato PPT.



