

Data Sheet

Silicone Sponge FR

Data Sheet Type	Final
Material Reference	Silicone Sponge FR
Polymer	Silicone
Date Issued	27/09/25



Description

Closed Cell Silicone Sponge suitable for applications requiring excellent flame retardancy in extreme temperature applications. The material meets WRAS, FDA and Flammability standards including FAR 25/JAR 25 and UL94V1.

The material has excellent resistance to ozone, oxidation, UV, ionising radiation and weathering.

Specifications	Values	Test Methods
Brittle Point	-80 °C	ASTM D1746
Compression Set(22 Hours @ 70°C)	1 %	ISO 3386
Compression Stress/Strain - 25%	6 PSI	ASTM D1056
Compression Stress/Strain - 40%	90 Kpa	ISO 1856
Density	240 Kg/m3	ISO 845
Elongation at Break	180 %	ASTM D412
Flame Resistance	UL94	UL94
Highest Recommended Working Temperature	230 °C	None
Limiting Oxygen Index (LOI)	24 %	BS2782
Lowest Recommended Working Temperature	-60 °C	None
Shore Hardness (Shore A)	9 ° Shore	ASTM D2240
Shore Hardness (Shore OO)	48 ° Shore	ASTM D2240
Tensile Strength	0.53 MPA	ISO 1798
Thermal Conductivity	6.4x10 ⁻² W/m.K	BS 874
Water Absorption	5 %	ASTM D1056

Purposes



Flame Retardant



Food Contact Suitability



High Working Temperature



Ozone Resistance



Weather Resistance

Important Notes about this Material Data Sheet

This datasheet has been carefully compiled to advise you, our customer, in the best possible way. The information, figures, test values, and data correspond to actual engineering standards and are the result of many years of tests and trials. As individual operating conditions influence the application of each product, the information supplied in this datasheet can only be seen as a rough guideline. In every case it is the sole responsibility of the customer to evaluate his individual requirements, in particular whether the specified properties of our products are sufficient for the intended use. This datasheet is subject to alteration without prior notice. All mentioned values contained herein are guiding values representing long-term experience averages. Please be aware that Test Results for individual Material Batches will only be provided if requested at the time of order and may be subject to additional charges and/or lead times. This Data Sheet supersedes all previous data sheets and any other data previously provided either Verbally, Electronic or Written, with reference to the above Material Grade.