

OVERVIEW AND GENERAL PROPERTIES

Is our range of expanded silicone sponge that has a closed cell structure with a smooth outer wall.

It offers excellent thermal stability to withstand the extremes of temperature from -50oC up to 250oC, resistance to UV and Ozone and also an excellent compression set of 15% typical.

DENSITY

Our Silicone Sponge is available in four standard densities; 0,16gr/cm³ soft, 0,25gr/cm³ medium, 0,39gr/cm³ firm to 0,53gr/m³.

As part of our service we can additionally offer tailored grades and densities on request.

SIZES

From our standard range we can produce sizes from 2.0mm to 100mm and the majority of our range (up to 70mm dia.) can be produced to the tightest ISO 3302 high precision tolerance.

We have an enviable level of experience and track record at providing custom densities and can produce practically any shape that you require.

OPTIONS

Our product can be provided on spools.

We can produce in a range of standard colours and also offer a colour matching service.

We can also provide self adhesive backing and fabric finishes to our products.

GENERAL CHARACTERISTICS

Properties	0,16gr/cm ³ (soft)	0,25gr/cm ³ (medium)	0,39gr/cm ³ (firm)	0,53gr/cm ³ (extra firm)	Test
Density (Imperial)	10 lbs/ft ³ (±4)	16 lbs/ft ³ (±4)	24 lbs/ft ³ (±4)	33 lbs/ft ³ (±4)	BS EN ISO 845
Density (Metric Kg/m ³)	160Kg/m ³ (±65)	255Kg/m ³ (±65)	390Kg/m ³ (±65)	530Kg/m ³ (±65)	BS EN ISO 845
Density (Metric g/cm ³) *1	0,16g/cm ³ (±0.06)	0,25g/cm ³ (±0.06)	0,39g/cm ³ (±0.06)	0,53g/cm ³ (±0.06)	BS EN ISO 845
Hardness *2 Shore 00	35 (±5)	47 (±5)	68 (±5)	83 (±5)	ASTM D2240
Shore A	<5	6 (±3)	18 (±3)	32 (±3)	
Elongation at break (%) 100mm thick	200	215	225	245	BS ISO 37
Compression set (%) *1	15	15	15	10	EN ISO 1856
50% compression for 22 hours at 70°C					
10mm thick sample					
Compression Deflection (25%) typical kpa	25	50	75	100	
Tensile strength (Mpa)10mm thick	0.5	0.65	1.05	1.60	BS ISO 37
Tensile strength (newtons)10mm thick	50	65	110	160	BS 4443
Temperature Max (°C) Continuous	200	200	200	225	
Intermittent	200	200	225	250	
Temperature (Min) °C	-50	-50	-50	-50	
Toxicity NEW 713	14	14	14	14	NES 713 Issue 03
Smoke Index	46	46	46	46	NES 713 Issue 02
Burn rate	0.03mm/s	0.03mm/s	0.03mm/s	0.03mm/s	BS 4735: 1974
Thermal Conductivity (W/m.K)	0.0695W/m.k	0.0695W/m.k	0.0695W/m.k	0.0695W/m.k	

*1 Compression set and density may vary depending upon product size and thickness

*2 Shore A data is provided as an approximate indication, due to testing limitations

TOLERANCES

SIZES	Tolerance ISO 3302-1: 1996
	Standar E3
0 to 1.5	+/- 0.40
>1.5 hasta 2.5mm	+/- 0.50
>2.4 hasta 4.0mm	+/- 0.70
>4.0 hasta 6.3mm	+/- 0.80
>6.3 hasta 10.0mm	+/- 1.00
>10.0 hasta 16.0mm	+/- 1.30
>16.0 hasta 25.0mm	+/- 1.60
>25.0 hasta 40.0mm	+/- 2.00
>40.0 hasta 63.0mm	+/- 2.50
>63.0 hasta 100mm	+/- 3.20