

Silicone Sponge

Data Sheet 01

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Introduction:

Silicone rubber can be expanded into silicone sponge by using blowing agents. The resulting sponge has a fine non-interconnecting cell structure encapsulated by a soft, smooth, outer skin. Silicone sponge is an excellent sealing medium, due to its stable chemical structure and good recovery. It can be extruded into profiles and produced in sheet form. The profiles can be butt-joined or mitred to form continuous seals; the sheet can be cut into gaskets.

General Properties:

- Minimal water absorption (IP65-66 achievable)
- Resistance to ultraviolet light and corona is good
- Resistance to arcing and ozone is good
- Oxidation is virtually non-existent
- Excellent for vibration damping and cushioning components
- Generally resistant to moderate or oxidising chemicals
- Excellent heat insulation

Specific Data:

	SP/16	SP/24	SP/33
Density (lbs per cu. ft.)	16 ±4	24 ±4	33 ±4
Density (Kg per M3)	250 ±60	400 ±60	550 ±60
Elongation %	225	215	245
Compression Set %	15	15	10
Force at Break (Newtons)	65	110	160
Temperature (Max) °C	200	200-225	225-250
Temperature (Min) °C	-50	-50	-50
Toxicity NES 711 Iss. 3	1.4	N/A	N/A
Smoke Index NES 711 Iss. 2	46	N/A	N/A
Burn Rate BS4735: 1974	0.03mm p/sec.	N/A	N/A
Thermal Conductivity	0.0695 W(m.k.)	N/A	N/A

Colour:

The standard colour of silicone sponge is off-white, but it can be supplied in a variety of colours on request, subject to minimum order.

Food Applications:

Silicone sponge can be used in applications where it will not come into direct contact with foodstuffs. Thus it can be used as seals on food containers, food processing ovens, refrigeration seals and food handling equipment. However, we do not recommend that it be used in applications where it will be in direct contact with foodstuffs.

RoHS Compliance:

We certify that our silicone sponge is RoHS compliant, and does not contain Lead, Mercury, Hexivalent Chromium, Cadmium, Polybrominated Biphenyls or Polybrominated Diphenyl Ethers

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Manufacturing Capabilities:

Cord:	From 2mm minimum to 80mm max
Tubing:	From 2mm minimum internal diameter From 3mm minimum wall thickness Up to 85mm outside diameter
Rectangular Sections:	From 2mm minimum to 50mm maximum thickness From 3mm minimum to 90mm maximum width
Profiles:	Custom profiles can be produced in sponge, but the ability to manufacture is based on the complexity of the shape required.
Sheet:	Standard sheet size 1000mm x 600mm (other sizes to order). Thickness from 1.6mm to 25mm.
Fabric-Finish Sheet:	Standard sheet size 1000mm x 500m. Thickness from 3mm to 12mm.
Fabrication:	SFS specialises in the manufacture of joined rings, picture-frame gaskets and cut lengths. Sponge can be bonded onto other substrates such as metal or plastic.
Punched Components:	High and low volume runs of washers or gaskets to customer specifications.
Adhesive Backing:	SFS can apply adhesive backing to sheets or rectangular sections. Two types of backing are available, see data sheet 10 for details.

SP16

SP24

SP33