

Silicone Sponge

Data Sheet 21

Page 1 of 3

Introduction: SP16 FS (Food Safe)

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
- **Compliant with FDA 21 CFR 177.2600 section e-f**
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Typical Data:

SP16FS	
Density (lbs per cu. ft.)	16 ±4
Density (Kg per M3)	250 ±60
Elongation %	225
Compression Set %	15
Force at Break (Newtons)	65
Temperature (Max) °C	200
Temperature (Min) °C	-50
Toxicity NES 711 Iss. 3	1.4
Smoke Index NES 711 Iss. 2	46
Burn Rate BS4735: 1974	0.03mm p/sec.
Thermal Conductivity	0.0695 W(m.k.)

Colour:

The standard colour of SP16FS is light blue, but it can be supplied in a variety of colours on request, subject to minimum order.

Food Use

SP16 FS has been specially designed for use in food safe applications. It has been independently tested and found to be compliant with the criteria laid down in FDA 21 CFR 177.2600 E – F.

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Test Report

Your reference: PO 091/15B

Our reference: RC24472

Sample(s) description: Rubber sheet-SP16FS

GR No. 15/358

MC Test Report No. R15512

Date received: 09 Jun 2015

Date of report: 17 Jun 2015

Contact for this Report: *D.Heisnam* E-mail *dhiren@rubberconsultants.com*

Recipient: Tony Parker

Company name and address: The SFS Manufacturing Group

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Query: Extraction testing CFR21 177.2600 section e and f

Samples are analysed as received. The various tests carried out, with their log identifying numbers, dates of testing and the initials of the person who carried out the tests, are tabulated below. Test reports shall not be reproduced except in full, without written approval of the laboratory.

Test ref. no.	Test type by initials and test identifying run nos.	Date of testing	Operator
*	Extraction	16 Jun 2015	DH/JMB

This report has been approved for release by

 18 June 2015

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Report No. R15512 (RC24472)

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Sample of rubber was submitted for testing in aqueous and fatty food stimulant media for compliance with FDA 21 CFR 177.2600 sections e – f.

FDA 21 CFR 177.2600 section e – aqueous food

The sample was refluxed in boiling distilled water for seven hours and then for a further two hours in a fresh aliquot of distilled water.

Sample	Extracted material (mg / square inch)	
	7 hours	2 hours
Rubber sheet SP16fs	0	0
Specification	20	1

FDA 21 CFR 177.2600 section f – fatty food

The sample was refluxed in boiling n-hexane for seven hours and then for a further two hours in a fresh aliquot of n-hexane.

Sample	Extracted material (mg / square inch)	
	7 hours	2 hours
Rubber sheet SP16fs	14	2
Specification	175	4

Interpretation

The sample of SP16fs is compliant with 21 CFR 177.2600 sections e – f.