

VGD16-33FR Flame Retardant Silicone Sponge

General Information

VGD16-33FR is a specially formulated silicone sponge designed to offer the same properties as our general purpose sponge, whilst also adding flame retardance, compliant to UL94-V0 standards. This material is particularly suited to demanding applications where there is a risk of contact with fire, or a demand for safety from fire.

Products

Available as sheets, sections, cord, tubes and bespoke profiles. Supplied as lengths, O-rings, gaskets. Self-adhesive & fabric finish optional.

Densities

VGD16FS (medium), VGD24 (firm), VGD33 (extra firm)

Sizes

From our standard range we manufacture sizes from 2.0mm to >100mm and our expertise allows us to manufacture practically any profile. The majority of sizes can be produced up to the tightest ISO 3302 E1 tolerances upon request with E3 tolerances promised as standard.

Applications

Sealing, gaskets, O-rings, extreme temperatures, vibration dampening, thermal insulation, industrial rollers, paper making, flexibility, weather resistance, noise reduction and more.

Silicone sponge's flexibility makes it succeed where many solid profiles might fail and a great compression set means a longer lifespan, decreasing the need for maintenance.

This information and our technical advice, whether verbal, in writing or by way of trials, is given in good faith. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose. This also applies where proprietary rights are involved. Our advice does not release you from the obligations to check its validity and to test our products as to their suitability for their intended use. The storage, application and use of our products are beyond our control and, therefore, entirely your own responsibility. The information contained within this data sheet is subject to change without notice.

Viking Extrusions Ltd – Ivy Arch Road, Worthing, West Sussex, BN14 8BX, UK Company Number: 2634482UK VAT Number: GB587651394 Registered in England & Wales



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Material Properties

Property	VGD16 (medium)	VGD24 (firm)	VGD33 (extra firm)	Test
Density (lbs/ft ³)	16 (±4)	24 (±4)	33 (±4)	BS EN ISO 845
Density (Kg/m ³)	255 (±65)	390 (±65)	530 (±65)	D3 LIN 130 843
Hardness* Shore OO	47 (±5)	68 (±5)	83 (±5)	ASTM D2240
Hardness* Shore A	6 (±3)	18 (±5)	32 (±10)	ASTIVI DZZ40
Elongation at break (%)	215	225	245	BS ISO 37
Compression set** (%)				
50% compression 22hrs @	15	15	10	EN ISO 1856
70°C)				
Compression Deflection	50	75	100	
25% typical kPa	50	75	100	
Tensile strength (MPa)	0.65	1.05	1.6	BS ISO 37
Temperature (min) (°C)	-50	-50	-50	
Temperature (max) (°C)				
Continuous	200	200	225	
Intermittent	200	225	250	
Toxicity	14	14	14	NES713 Iss. 03
Smoke Index	46	46	46	NES711 Iss. 02

*Shore A data is provided as an approximate comparison to solid rubbers only, due to testing limitations it is not possible

to accurately record Shore A hardness for silicone sponge.

**Compression set & density will vary depending on product size and thickness.

Please note our information is based on lab tested samples of 25mm square.

These figures are only intended as a guide and should not be used in preparing specifications.

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