

# VGD450CL

## Silicone Sponge Electrically Conductive (Closed Cell)

### Description & Features

This electrically conductive silicone sponge has been developed for use in electronic applications where anti-static properties are required. This material has very good flame retardant characteristics. It is excellent for vibration damping and cushioning components, heat insulation and heat resistance.

- Closed cell with nearly no water absorption. Dust ingress protection to IP65 / IP66/ IP67 (design dependent).
- Meets the horizontal flammability test FAR 25/JAR 25/CS 25 APP. F, Part 1, (a) (1) (iv) and (a) (1) (v).
- Meets Automotive Standard PART 571MVSS302
- Meets requirements for UL94 HB (not certificated)
- No toxic combustion/smoke gases
- Plasticizer Free

### Material Properties

Property	Unit	Value	Test Method
<b>Density</b>	Kg/m <sup>3</sup>	450-500 ±60	DIN 53504 ISO / DIS 37
<b>Hardness</b>	° Shore A	25-30±5 (typ. 27±5)	DIN EN ISO 53505 DIN EN ISO 868
<b>Tensile Strength</b>	MPa	min. 3	DIN 53504 ISO / DIS 37
<b>Elongation</b>	%	min. 150 (typ. 175)	DIN 53504 ISO / DIS 37
<b>Compression Set 22h  175°C</b>	%	40.0 ±5	BSENSIO 815
<b>Electrical Resistivity</b>	Ω·cm	1000	Ω·cm
<b>Temperature Range</b>	°C	-60 to +220/230	ASTM D746
<b>Thermal Conductivity</b>	W/mK	0.07	VDE 0304
<b>Radiation Resistance</b>	Grays (Rads)	10 <sup>5</sup> (10 <sup>7</sup> )	
<b>Limiting Oxygen Index</b>	%		BS 2872 Part 1

*Density & hardness are related to cross-section/thickness and are only guidelines. Smaller/thinner samples will have higher density/hardness, determined by the material's cellular structure.*

### Resistance Characteristics

This silicone sponge is resistant to:

- UV
- Weathering
- Many diluted acids & bases
- Ozone
- Corona discharge
- Certain oil types
- Oxidation
- Cosmic and ionizing radiation.

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