

VGD16-33FS

Food Safe Silicone Sponge

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

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.

Material compliance

| Property | VGD16FS | VGD24FS | VGD33FS |
|--------------------------------|---------------|---------|---------|
| Density (lb./ft ³) | 16 ±4 | 24 ±4 | 33 ±4 |
| Density (kg/m ³) | 250 ±60 | 400 ±60 | 500 ±60 |
| Elongation (%) | 225 | 215 | 245 |
| Compression Set (%) | 35 | 25 | 25 |
| Tensile Strength (kN/m) | 2.5 | 4 | 5 |
| 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 | 0.065 W(m.k.) | N/A | N/A |

Density values are quoted at standard test thickness of 20mm and will increase as material thickness decreases due to the effects of a constant thickness surface skin.

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

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VGD16-33FS

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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

Material Safety Datasheet

Section 1: Composition

Synonyms: SP** LEV** AD**

Chemical Name: Cellular Silicone Sponge Rubber

Chemical Family: Silicone

Section 2: Hazards Identification

Ingredients: Polysiloxane with filler, pigment and auxiliary material

CAS#: N/A

%: >90%

ACGIH-TLV, TWA: Not established

OSHA PEL: Not established

This material is exempt from the Hazard Communication Standard since it is produced as an "article" as defined in 20 CFR 1910.1200 (b)(6)(v). An "article" is defined in 1910.1200(c). Under normal conditions of use, this material does not release and will not result in exposure to a hazardous chemical. Therefore, no Material Safety Data Sheet is required. This data sheet is therefore provided only as a convenience to users of our products.

| | |
|---|--|
| LD50 – LC50: | None specified. |
| Route of Entry – Eyes: | May cause slight eye irritation. |
| Route of Entry – Skin: | No acute toxic skin effects are expected. |
| Route of Entry – Ingestion: | Not expected to be an ingestion hazard. |
| Route of Entry – Inhalation: | Not expected to be an inhalation hazard. |
| Health Hazard Acute and grinding and other chronic: | None are expected with normal handling. Cutting, finishing operations may generate nuisance dust. As such, proper ventilation and personnel protection measures should be taken to limit exposure to nuisance dusts as defined by OSHA. Hot wire cutting operations may produce toxic fumes. |
| Carcinogenicity – NTP: | NA |
| Carcinogenicity – IARC: | NACarcinogenicity – OSHA: NA |

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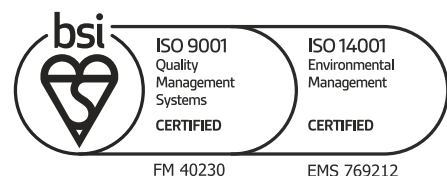
Viking Extrusions Ltd – Ivy Arch Road, Worthing, West Sussex, BN14 8BX, UK

Company Number: 2634482UK

VAT Number: GB587651394

Registered in England & Wales

REV 03 – Last Updated: 13/06/24



VGD16-33FS

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Section 3: First Aid Measures

| | |
|---|---|
| Signs and symptoms of overexposure: | None known. |
| Medical conditions aggravated by overexposure: | None specified. |
| National Fire Protection Association (NFPA) Hazardous Material Information System: (HMIS) | Ratings have not been established for this material. Health:1 Fire: 1 Reactivity: 0 PPE: B |

Section 4: Firefighting Measures

| | |
|-------------------------------------|---|
| Eye Contact: | In case of eye contact, immediately rinse with clean water for at least 15 minutes. Obtain medical attention if pain, blinking, tears or redness persist. |
| Skin Contact: | Wipe off excess material with cloth or paper. Use a waterless hand cleaner to remove as material as possible. Wash with soap and water. |
| Inhalation: | Material cannot be inhaled under normal conditions |
| Ingestion: | Ingestion unlikely. However, if ingested, obtain medical attention |
| Flash Point: | NA |
| Lower Explosive Limit: | NA |
| Upper Explosive Limit: | NA |
| Extinguishing Media: | Water, dry chemical, alcohol resistant foam, carbon dioxide, sand. |
| Special firefighting procedures: | Wear full protective gear including a self-contained breathing apparatus. Cool endangered containers with water. |
| Unusual Fire and Explosion Hazards: | Hazardous decomposition products: carbon dioxide, formaldehyde, silicone dioxide and incompletely burnt hydrocarbons. No unusual explosion hazards. |

Section 5: Accidental Release Measures

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| Steps to take if material released/spilled: | Clean up while avoiding the creation of nuisance dust. |
| Precautions: | No special measures are required. |
| Neutralizing agent: | None specified |

Section 6: Handling and Storage

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|-------------------------------|---|
| General storage requirements: | Keep away from open flame, electrical or mechanical sparks, electric heaters, high-powered lights, flame sources and flammable liquids and gases. Store in a cool, dry place. |
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Section 7: Exposure Controls and Personal Protection

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|-------------------------|--|
| Eye protection: | Wear safety glasses during cutting operations |
| Skin protection: | Not expected to be a skin hazard. Where use can result in skin contact practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, and when leaving the work area. |
| Respiratory protection: | Wear a suitable dust mask during mechanical cutting operations. |
| Ventilation: | Use sufficient ventilation to keep dust exposure below the 5mg/m ³ recommended for nuisance dust. |

Section 9: Stability and Reactivity

| | |
|----------------------|---------------------------|
| Physical state: | Semi-rigid cellular sheet |
| Odor: | Slight, characteristic |
| Specific gravity: | 0.1 – 0.5 |
| Vapour pressure: | NA |
| Evaporation rate: | NA |
| Solubility in water: | Insoluble |
| pH: | NA |

Section 9: Stability and Reactivity

| | |
|---------------------------|---|
| Stability: | Stable under normal conditions. |
| Incompatibility: | None known. None, if stored and handled in accordance with standard industrial practices and local regulations where applicable. Measurements have shown small amounts of formaldehyde at temperature above about 150°C (302°F) through oxidation. |
| Hazardous Polymerization: | Will not occur. |
| Conditions to Avoid: | None known |

Section 10: Transportation Information

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|-------------------------|-----------------------------------|
| Proper shipping name: | Semi-rigid silicone sponge rubber |
| Primary hazard class: | NA |
| Secondary hazard class: | NA |
| Label required: | None |
| Placard required: | None |
| Poison constituent: | NA |

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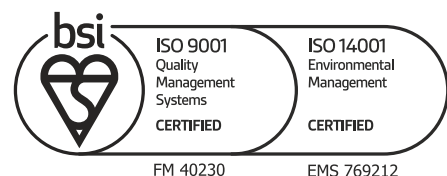
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Section 11: Other Information

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|--------------------------|---|
| General comments: | Some of the information presented and conclusions drawn herein are from sources other than direct test data of the material itself. |
| Disclaimer of liability: | The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of processing, handling, storage, use and disposal of the material are beyond our control and beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the material. |

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