

## SORBERFOAM PE SGF

### closed cell silicone faced thermal insulation

Sorberfoam PE SGF is a very unique product which combines excellent thermal properties while meeting some of the most stringent fire requirements according to the EN45545-2 standard.

Being made out of specially formulated closed cell polyethylene foam, it can be used not only in dry, but also wet or humid environments, as moisture will not penetrate into the insulation layer. Having silicone facing means it is highly resistant to staining and can be easily cleaned by either wiping the surface or even hosing it clean. White silicone is the standard colour however others are available on request.

Glass fabric backing behind the silicone layer offers ultimate durability and protection from accidental punctures and wear.

Unlike a lot of thermal insulation which is either very thick, hard to handle or stiff, Sorberfoam PE SGF offers great thermal insulation at thicknesses as low as 5mm and can be easily formed to uneven surfaces due to it's pliability.

To further ease installation, Sorberfoam PE SGF comes with pressure sensitive adhesive as standard, making is very easy and quick to install.

### STORAGE AND SHELF LIFE

Sorberfoam PE SGF will not degrade over the period of 12 months if stored with or without it's original packaging as long as the conditions of maximum temperature of 60 deg C and 80% RH are met and there is no exposure to sunlight. This covers materials that are provided in sheets as well as cut parts. In case of cut parts, all parts must be stored flat free from potential folding preventing creasing of the surface.

### SPECIFICATIONS

Colour	White (other colours available on request)
Available	Sheet Size: 1.0 x 2.0 m
	Thickness: 5 - 20 mm



### applications

- Thermal automotive trim lining
- Thermal insulation for wet and humid environments
- Decorative interior of the cabins

### features

- Tested to EN45545-2 R1 HL2 (report no. 0283-21-F)
- Self-adhesive
- Available in various colours based on MOQ
- Excellent thermal insulation at low thicknesses
- Flexible/pliable
- Easy to clean and stain resistant
- Lightweight



## MATERIAL PROPERTIES

Description	Standard	Results	Report Number
Fire and Smoke	EN45545-2	R1 & R7 HL2	0283-21-F
Climatic Chamber Aging	MIL-STD 810E	Complies	22-Z026
Thermal Conductivity	EN 12667	0.041 W/(m.K) @40 deg C	415600689-01
Peel/Adhesion Strength	ISO 8510-2 (180 deg Peel)	Longitudinal: 5.3N/25mm Transverse: 4.0N/25mm	12323-RV
Water Vapour Resistance Factor ( $\mu$ )	EN12572	2413	415600688-01
Recommended maximum Operating Temperature (Short Term-2 min)	Internal	100 deg C	N/A
Apparent Density - Skin/Skin*	BS EN ISO 7214:2012	15 kg/m <sup>3</sup>	-
Cell Size (Cell Diameter)*	Internal	0.4 mm	-
Compression Stress-Strain (25%)*	BS EN ISO 7214:2012	44 kPa	-
Compression Stress-Strain (50%)*	BS EN ISO 7214:2012	107 kPa	-
Tensile Strength*	BS EN ISO 7214:2012	217 kPa	-
Tensile Elongation*	BS EN ISO 7214:2012	92 %	-
Flammability - Automotive*	FMVSS.302 - Burn Rate	Pass at 2mm <100mm/min	-
Tear Strength*	BS EN ISO 8067:2008 Method B	848 N/m	-
Shore Hardness - OO Scale*	BS EN ISO 868:2003	49	-
Recommended Maximum Operating Temperature* <sup>1</sup>	Internal	85 °C	-
Water Vapour Transmission (Permeability $\delta$ )*	ISO 12572	0.000314 mg/m.h.Pa	-
Thermal Conductivity*	EN12667	0.0349 at 10 deg C W/(m.K)	-

\* Results for Sorberfoam PE only

<sup>1</sup> The maximum operating temperature shown is defined as the temperature which will typically cause a linear shrinkage of 5% after a 24hr exposure period, using sample dimensions of 100 mm x 100 mm x 25 mm. This figure is provided for general guidance only. The actual level of shrinkage the foam will undergo at any particular temperature is dependent on a number of system variables such as, sample dimensions, cell size, loading conditions and exposure period.