

SORBERMEL® GC

fire retardant and sound absorbing melamine foam with a glass cloth surface facing

Sorbermel GC is a flexible, open-cell, acoustic and thermal insulation product constructed using a melamine insulation base, thermally bonded with a fire-rated glass cloth (GC) facing. It is lightweight, flame retardant and offers excellent sound absorption and thermal insulation properties.

The GC facing is bonded to the insulation base, using micro-perforated webbing. The inherent properties of the GC face complement the fire and thermal insulation performance of the product. It also protects the melamine base from damage and prevents dirt ingress.

Sorbermel foam is dimensionally stable, inherently moisture resistant and resists foam rot. The foam structure features a 3D network of thin melamine resin filaments that absorbs sound energy to prevent reverberation.

Being low-weight, it contributes to the energy efficiency of rail and utility vehicles, enhancing passenger safety. It's also particularly suited to building interiors where surfaces of insulation are exposed.

Sorbermel GC is a favoured choice in weight-sensitive applications, harsh environmental conditions or where enhanced fire safety properties are required. Its unique flexibility allows for easy installation with basic tools, making it perfect for use in rail, marine, automotive, building or construction industry.

SPECIFICATIONS

Colour	Grey and black (additional colours available on request depending on MOQ)
Available	Standard sheet: 1.2 x 2.4 m trimmed Thickness: 25 or 50 mm (Available thickness 10 to 100 mm)
	Custom sizes and custom kit options available depending on MOQ



applications

- Transport: engine compartments and cabin insulation for trains, buses, trucks or automotive
- Commercial buildings: HVAC systems
- Industrial: Machinery/generator set enclosures, electrical equipment, wall/ceiling linings for plant and equipment rooms
- Boats and marine survey

features

- Lightweight - offers energy efficiency/passenger safety in the transport industry
- Wide sound absorption range and high thermal insulation properties
- Excellent fire retardant properties
- High continuous operating temperature
- Free of mineral fibres
- Resists hydrolysis - will not rot
- Long service life - constant physical properties over a wide temperature range
- Self-supporting – no additional structures required to maintain shape
- Easy to cut, shape, fabricate and install
- Custom kit options available to meet size requirements
- Available with different surface coverings and self-adhesive backing for ease of installation
- Available with hydrophobic treatment



PRODUCT SPECIFICATIONS

Product	Standard thickness	Density (foam)	Sheet size	Thermal conductivity (DIN 52612)	Elongation at break (DIN 53571)	Tensile strength (DIN 53571)	Operating Temperature range
Sorbermel GC 25	25 mm (0.98 in)	9 kg/m ³ (0.56 lb/ft ³)	1.2 x 2.4 m (3.9 ft x 7.9 ft) trimmed	0.035 W/mK	10%	120 kPa (min)	-40 to 150 °C (-40 to 302 °F)
Sorbermel GC 50	50 mm (1.97 in)						

Tolerances: Length: -0, +50 mm (2 in); Width: -0, +5 mm (0.2 in); Thickness: ± 2 mm (0.08 in); Density: Density: ±1.5 kg/m³ (0.09 lb/ft)

All above products are available with pressure-sensitive adhesive backing. Under extreme temperature and humidity conditions, air flow or where the substrate surfaces cannot be freed from contaminants, mechanical fixing will be required. For all inverted installations including ceiling installations, mechanical fixing must be done in addition to pressure sensitive adhesive. Please consult your local Pyrotek representative for more information.

MATERIAL PROPERTIES

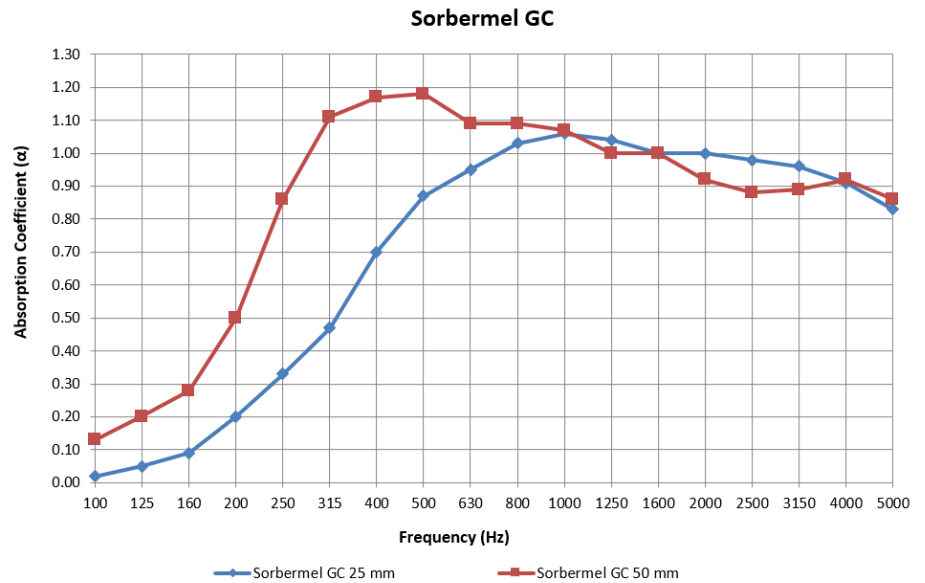
Test method	Property	Report	Results
AS/NZS 3837	Fire hazard properties	FH 4999	Group 1*
UL94	Flammability of plastic materials	15014BD	Self-extinguishing (SE)
FMVSS-302	Flammability of interior materials	15014BD1	Complies to the requirements of US (DOT) Department of transportation for occupant compartments of motor vehicles

*Results apply to unfaced melamine foam

ACOUSTIC PERFORMANCE

Frequency (Hz)	Sorbermel GC 25 mm	Sorbermel GC 50 mm
100	0.02	0.13
125	0.05	0.20
160	0.09	0.28
200	0.20	0.50
250	0.33	0.86
315	0.47	1.11
400	0.70	1.17
500	0.87	1.18
630	0.95	1.09
800	1.03	1.09
1000	1.06	1.07
1250	1.04	1.00
1600	1.00	1.00
2000	1.00	0.92
2500	0.98	0.88
3150	0.96	0.89
4000	0.91	0.92
5000	0.83	0.86
NRC	0.80	1.00
SAA	0.80	0.99
α_w	0.65 (MH)	1.00

Tested to ISO 354:2003 at University of Canterbury, New Zealand
Report Numbers: 301 & 302



For further information and contact details, please visit our website pyroteknc.com

Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical and fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights. **DISCLAIMER:** This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See pyroteknc.com/disclaimer.

