



SORBERMEL® M

fire retardant melamine foam with a metallised polyester film facing

Sorbermel M is a lightweight and flexible open-cell light grey foam made from melamine reinforced with a durable impervious facing of metallised polyester film. It is a favoured choice in weight-sensitive applications.

The product features a three-dimensional delicate network structure of slender filaments. The open-cell structure enhances sound absorption and traps noise energy to prevent it from reflecting as an echo. Sorbermel is ideal where moisture resistance is required.

Being low-weight, Sorbermel M contributes to the energy efficiency of transport and utility vehicles. It enhances mid to low frequency absorption and provides additional protection from mechanical stress and dirt, oil and liquid and increases the fire and thermal insulation performance of the product.

Sorbermel achieves some of the highest classifications in fire ratings to meet national and international standards. Sorbermel is the choice for various industrial applications such as the Automotive, Building and Construction.

VOC, ODP, HEALTH AND SAFETY

Sorbermel M is non-toxic and safe to handle by methods prescribed in the Safety Data Sheet.



applications

- Mining equipment and insulation of mining vehicles
- Industrial: Electronic/electrical equipment, white goods

features

- Fire-resistant sound absorber - impressive fire retarding properties without the addition of flame retardants
- Lightweight - offers energy efficiency and passenger safety in the transport industry
- Sorbertextile M facing outperforms comparable products at low frequencies
- Heat and light reflective
- Clean and easy to handle - free from irritating 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
- Easily cut, shaped, fabricated and installed
- Custom kit options for design requirements
- Available with self-adhesive backing for ease of installation
- Available with hydrophobic treatment

SPECIFICATIONS

Colour	Light grey (foam) Silver (Sorbertextile M facing)
Available	Standard sheet size: 2.5 m x 1.3 m (8.2 ft x 4.3 ft) Available thickness: 6 to 100 mm (0.24 to 3.94 in)
	Custom kit options, sizes, colours and/or thicknesses available depending on MOQ





PRODUCT SPECIFICATION

Thickness	Density (foam) EN ISO 845	Standard sheet size (Length x Width)	Thermal conductivity (W/mK) DIN 52612	Elongation at break DIN 53571	Tensile strength DIN 53571	Operating temperature range
6 to 100 mm (0.24 to 3.94 in)	10 to 11 kg/m ³ (0.62 to 0.69 lb/ft ³)	2.5 x 1.3 m (8.2 x 4.3 ft)	0.035	10%	120 kPa (min)	-40 to 150 °C (-40 to 302 °F)

Tolerances: Length: -0/+50 mm (2 in); Width: -0/+5 mm (0.2 in); Thickness: ±2 mm (0.08 in); Density: ±1.5 kg/m³ (0.09 lb/ft³). Other thicknesses and sizes available.

Supplied untrimmed - means some surface coverings such as foils, films or fabric may overhang the ordered usable width.

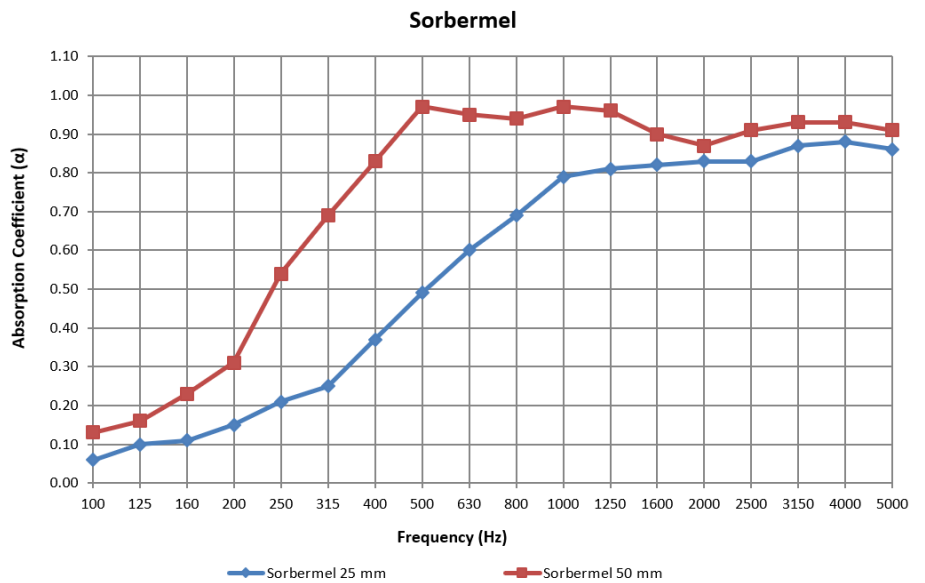
All above products are available with pressure-sensitive adhesive backing. Under extreme temperature and humidity conditions, air flow or where the substrate surfaces cannot be free from contaminants, mechanical fixing will be required. For all inverted installations including ceiling installations, 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 no.	Results
MEDG3608 Appendix C5	Electrical resistance of flat surface (Anti-static testing)	T20-00055/0002	Complies to MDG3608 for general applications.

ACOUSTIC PERFORMANCE

Frequency (Hz)	Sorbermel 25 mm	Sorbermel 50 mm
100	0.06	0.13
125	0.10	0.16
160	0.11	0.23
200	0.15	0.31
250	0.21	0.54
315	0.25	0.69
400	0.37	0.83
500	0.49	0.97
630	0.60	0.95
800	0.69	0.94
1000	0.79	0.97
1250	0.81	0.96
1600	0.82	0.90
2000	0.83	0.87
2500	0.83	0.91
3150	0.87	0.93
4000	0.88	0.93
5000	0.86	0.91
NRC	0.60	0.85
SAA	0.57	0.82
α_w	0.50 (MH)	0.80



Tested to ISO 354:2003 at University of Canterbury, New Zealand

Report Numbers: 297 & 298

Results are for un-faced Sorbermel

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.

