

SORBERMEL® AGC

fire retardant melamine foam with aluminium facing

Sorbermel™ AGC is a flexible, light-weight, open-cell, light grey foam made from melamine reinforced with a durable flame retardant aluminium foil covered glass cloth facing - "AGC". It is a favoured choice in weight-sensitive applications.

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

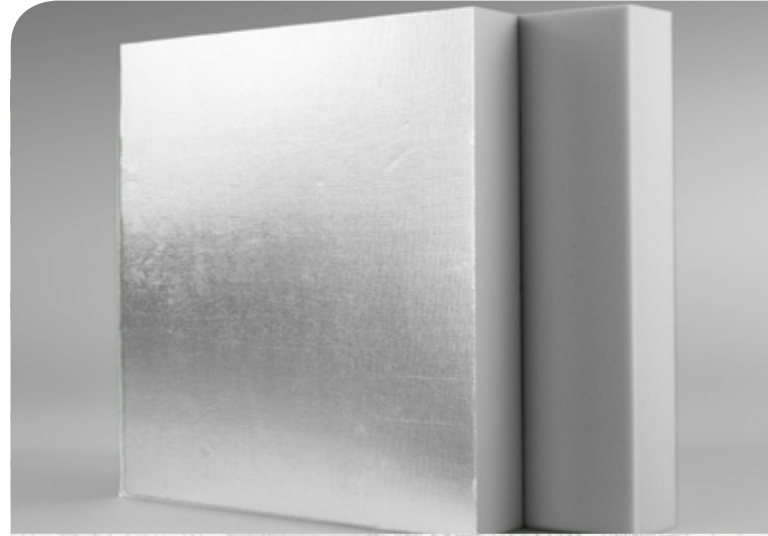
Being low-weight, Sorbermel™ AGC contributes to the energy efficiency of rail and utility vehicles. The use of the aluminium glass cloth face enhances mid to low frequency absorption and provides additional protection from mechanical stress and dirt, oil and liquid, and increases the fire and thermal 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 Rail, Automotive, Marine, Building and construction.

SPECIFICATIONS

Colour	Light grey with silver facing
Standard (sheets)	1300 x 2500 mm or customised as required Thickness: 20 mm (Available 6 - 100 mm) Custom kit options



applications

- Rail engine compartment and cabin insulation
- Enclosures; HVAC, Air conditioners, machinery and equipment enclosures, compressor and gen set enclosures.
- Automotive transport including buses, trucks and cars
- Industrial; Electronic/electrical equipment, white goods
- Wall and ceiling linings and enclosures for industrial plant and equipment rooms,
- Applications with stringent fire rating compliance requirements.

features

- High performance, 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
- AGC 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 cut to customer requirements
- Available with self-adhesive backing for ease of installation



PRODUCT SPECIFICATIONS

Standard thickness (mm)	Density (foam) (kg/m ³) (EN ISO 845)	Sheet length (lineal m)	Sheet width (mm)	Thermal conductivity (w/mk) (DIN 52612)	Elongation at break (DIN 53571)	Tensile strength (DIN 53571)	Service temperature range °C
20	10 - 11	2500	1300	0.035	10%	120 kPa (min)	2000h > 150

Tolerances: Length: - 0/+50mm; Width: - 0/+5mm; Thickness: +/- 2mm; Density: g +/- 5%

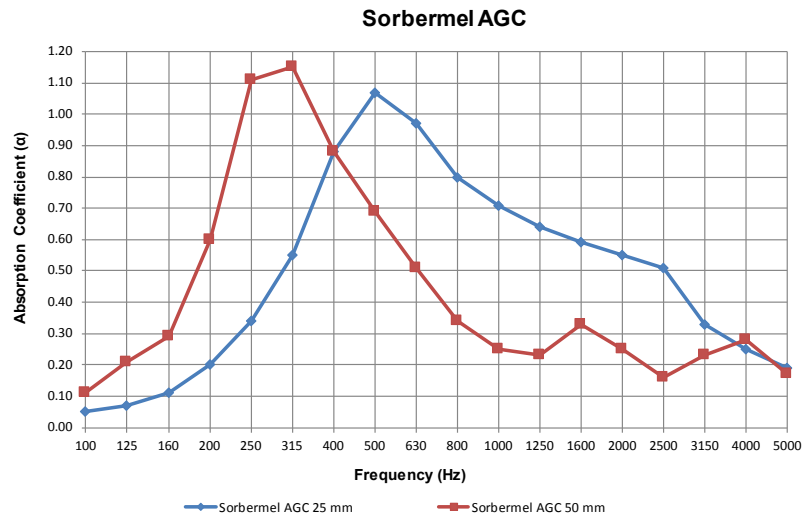
*Other thicknesses and sizes available. * Supplied untrimmed - means some surface coverings such as foils, films or fabric may overhang the ordered usable width.

MATERIAL PROPERTIES

Test method	Property	Report no.	Results
EN 45545-2 (ISO 5658-2)	Spread of flame	369550, 369540	R1, R7, R8, HL3
EN 45545-2 (ISO 5660-1 : 50kWm ²)	Heat release rate by cone calorimeter	369546, 369537	
EN 45545-2 (ISO 5659-2 : 50kWm ²)	Smoke generation (optical density)	370758, 370757	
IMO FTP Part 5	Surface flammability	369547	Complies for Bulkhead, walls and ceiling linings.
IMO FTP Annex 2	Smoke and toxicity	369547	
FMVSS 302	Flammability of interior materials	14713JY4	Complies to the requirements of US (DOT) Department of transportation for occupant compartments of motor vehicles
UL94 - HFB	Flammability of plastic materials	13513JY3	HF-1

ACOUSTIC PERFORMANCE

Frequency (Hz)	Sorbermel AGC 25 mm	Sorbermel AGC 50 mm
100	0.05	0.11
125	0.07	0.21
160	0.11	0.29
200	0.20	0.60
250	0.34	1.11
315	0.55	1.15
400	0.88	0.88
500	1.07	0.69
630	0.97	0.51
800	0.80	0.34
1000	0.71	0.25
1250	0.64	0.23
1600	0.59	0.33
2000	0.55	0.25
2500	0.51	0.16
3150	0.33	0.23
4000	0.25	0.28
5000	0.19	0.17
NRC	0.65	0.60
SAA	0.65	0.54
α_w	0.45 (M)	0.30 (LM)



Tested to ISO 354:2003 at University of Canterbury, New Zealand
Report Number: 299 & 300

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.

