



0575

## SORBERMEL® AGC

### fire retardant melamine foam with a protective aluminium facing

Sorbermel AGC is a lightweight and flexible 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.

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 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.

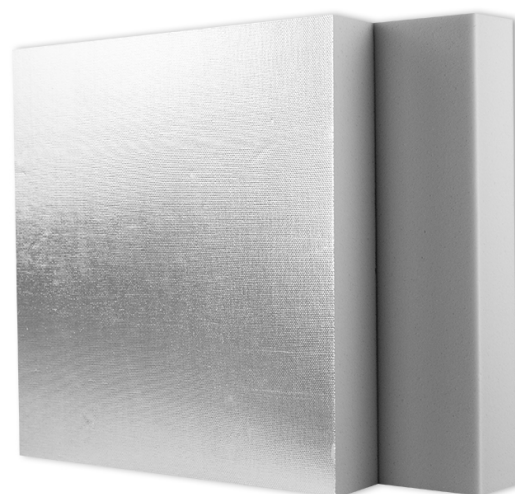
Sorbermel achieves some of the highest classifications in fire ratings to meet national and international standards. Sorbermel is the choice for various industrial applications such as the Rail, Automotive, Marine, Building and construction.

#### VOC, ODP, HEALTH AND SAFETY

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

#### SPECIFICATIONS

Colour	Light grey (foam) Silver (Sorbertextile AGC 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



### applications

- Marine vessels and pleasure crafts
- Rail engine compartment and cabin insulation
- Enclosures: HVAC/air conditioning machinery and equipment enclosures, compressor and gen-set enclosures.
- Automotive transport: 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

- 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 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 kit options for design requirements
- Available with self-adhesive backing for ease of installation
- Available with hydrophobic treatment



## 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)	9 kg/m <sup>3</sup> (0.56 lb/ft <sup>3</sup> )	2.5 x 1.3 m (8.2 x 4.3 ft)	0.035 @ 10 °C (50 °F)	10%	120 kPa (min)	-50 to 150 °C (-58 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/m<sup>3</sup> (0.09 lb/ft<sup>3</sup>). Other thicknesses and sizes available.

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

Results based on BASF Basotect® G+

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
EN 45545-2 (ISO 5658 <sup>-2</sup> )	Spread of flame	515656, 515657	R1, R7, HL3 (Valid for 3mm and 50mm thickness)
EN 45545-2 (ISO 5660-1 : 50kWm <sup>-2</sup> )	Heat release rate by cone calorimeter		
EN 45545-2 (ISO 5659-2 : 50kWm <sup>-2</sup> )	Smoke generation (optical density)		
IMO FTP Part 5	Surface flammability	369547	Complies for bulkhead, walls and ceiling linings at 3 mm thickness or greater. USCG Type approval granted
IMO FTP Annex 2	Smoke and toxicity		
MED B	EC Type Examination (Module B) for Marine Equipment Directive	MEDB000094R	
MED D	EC Type Examination (Module D) for Marine Equipment Directive	MEDD000028J	
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
$\alpha_w$	0.45 (M)	0.30 (LM)

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

