

# SORBERBARRIER ML-AGC

# high-performance absorber barrier composite

Sorberbarrier ML-AGC is a unique, multilayered noise control product that offers both noise transmission loss and noise absorption. The composite is comprised of two layers of absorbing foam - Sorbermel, a melamine resin based foam and Sorberfoam, a combustion modified polyurethane foam. The absorptive foam layers are bonded together with an inlay of a foil layer and a flexible mass barrier layer, Wavebar. An aluminium foil covered glass cloth facing is laminated to the surface of the melamine foam layer.

The melamine backbone exhibits excellent resistance to hydrolysis and combustion. The use of an aluminium foil covered glass cloth face provides additional protection to the foam from mechanical stress and dirt, oil and liquid ingress. The additional inner aluminium foil layer provides excellent vapour and fire barrier properties.

Insertion of the mass barrier between two layers of absorbing foam keeps the barrier separate from the structure to which it is bonded, allowing it to remain flexible thus enhancing noise transmission loss. Altering the thickness of foam that separates the noise barrier from the structure can improve Wavebar's performance in some frequencies without a substantial increase in overall weight.

Sorberbarrier ML-AGC combines the superior performance of the flexible mass barrier, Wavebar, together with the absorption properties of the foam layers, Sorbermel and Sorberfoam.

The foam layers combined with a mass barrier provides effective noise reduction, making it a highly versatile product for controlling noise.

### **SPECIFICATIONS**

Colour	Light grey (Sorbermel), Grey (Sorberfoam), Silver (AGC Facing)
Available	Sheet size: 1.3 m x 2.5 m (4.3 x 8.2 ft) Total thickness: 25 mm (1 in)
	Custom sizes available depending on MOQ



# applications

- · Cavity space of locomotive and rolling stock
- · Power generation units and containerised generator sets
- Additional thermal and acoustic insulation for airconditioning
- Engine compartments and firewalls of cars, trucks, buses and construction machinery
- Machinery and equipment enclosures
- Pool and spa motor enclosures
- Whitegoods industry
- General enclosures

# features

- Multifunction acoustic product absorber and barrier
- No ozone-depleting substances generated during manufacture
- Phenolic resins and irritating fibres not used during manufacture
- The Sorberfoam range is engineered to resist degradation (foam rot) more than traditional acoustic foam
- Low spread of flame surface
- Available as kits (depending on MOQ) Quick and easily installed in difficult places
- Easy to cut, adhere or mechanically fasten into position
- Can be constructed with other decoupling layers such as Sorberpoly and Sorbermel





#### **PRODUCT SPECIFICATIONS**

Product	Total thickness	Construction Absorptive melamine layer (mm)/Mass barrier (kg)/ Decoupler PU foam (mm)	Sheet size*	Operating Temperature range
Sorberbarrier ML AGC 25/5 kg (1 lb)	25 mm (1 in)	12 / 5 / 12 (0.5 in / 1 lb / 0.5 in)	1.3 m x 2.5 m (4.3 x 8.2 ft)	-40 °C to 100 °C (-40 °F to 212 °F) (continuous) -40 °C to 120 °C (-40 °F to 248 °F) (Intermittent)

Tolerances: Weight:  $\pm 0.5$  kg; Thickness:  $\pm 3$  mm ; Length and Width: -0 to +5mm

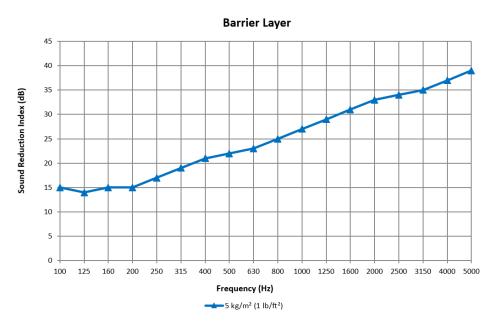
All above products are available with pressure-sensitive adhesive backing. Under extreme temperature and humidity conditions, air flow or where the substrate surfaces cannot be free from contaminants, mechanical fixing will be required. For all inverted installations including ceiling installations,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

## **MATERIAL PROPERTIES**

Test method	Property	Report	Results
EN 45545 (ISO 5658-2)	Spread of flame		R1, R7, HL3
EN 45545 (ISO 5659-2 : 50 kWm <sup>-2</sup> )	Smoke generation (optical density)	516957	
EN 45545 (ISO 5660-1 : 50 kWm <sup>-2</sup> )	Heat release rate by cone calorimeter		
FMVSS-302	Flammability of interior materials	08613PH	Complies to the requirements of US (DOT) Department of transportation for occupant compartments of motor vehicles

## **ACOUSTIC PERFORMANCE**

Frequency (Hz)	5 kg/m² (1 lb/ft²)	
100	15	
125	14	
160	15	
200	15	
250	17	
315	19	
400	21	
500	22	
630	23	
800	25	
1000	27	
1250	29	
1600	31	
2000	33	
2500	34	
3150	35	
4000	37	
5000	39	
Rw	26	
STC	26	



Tested to ASTM E90-09 at Riverbank Acoustical Laboratories, USA

Report Number: TI 18-642

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 acoust mechanical and file reginieer 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 or large refers will not infininge any third party's patents or rights.

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<sup>\*</sup>Supplied untrimmed. Some surface coverings such as foils, films or fabric may overhang the useable width.