SORBERMEL® GC

fire retardant and sound-absorbing melamine foam with glass cloth 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 fibreglass cloth facing - 'GC.' It's lightweight, flame retardant and offers excellent sound absorption and thermal insulation properties. Sorbermel foam is dimensionally stable, inherently moisture resistant and resists foam rot. The foam structure features a 3D network of slender melamine resin filaments that absorbs sound energy to prevent reverberation.

The glass cloth facing - 'GC', 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 protects the melamine base from damage; and prevents dirt ingress.

With these versatile properties, Sorbermel GC is a favoured choice in weight-sensitive, harsh environment applications and where enhanced fire safety properties are required. Being low-weight, it contributes to the energy efficiency of rail and utility vehicles, enhancing passenger safety. It's particularly suited to building interiors where surfaces of insulation are exposed.

A combination of impressive physical, acoustic, thermal and fire properties make Sorbermel GC the choice for various industrial applications such as rail, automotive, marine, building and construction, and others.

Sorbermel GC's unique flexibility only requires a few basic tools, making it easy to install and cost efficient.

applications

- Rail : engine compartment and cabin insulation
- Enclosures : air conditioners, machinery and equipment enclosures; compressor and generator set enclosures
- Auto and transport: buses, trucks and cars
- Industrial : electronic and electrical equipment, wall and ceiling linings for plant and equipment rooms
- White goods
- Suited to applications requiring high fire rating characteristics
- Commercial: restaurants, clubs, bars, general acoustic enclosures, air-conditioning and duct work
- Boats and marine survey
- Offices, schools, music rooms, computer rooms, hospitals and auditoriums

features

- Lightweight - offers energy efficiency/passenger safety in the transport industry
- Wide sound absorption range and good thermal insulation properties
- Very good fire retarding properties without the addition of flame retardants
- 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
- Easily cut, shaped, fabricated and installed, saving cost
- Cut parts are available to customer requirements
- Available with different surface coverings and self-adhesive backing for ease of installation

SPECIFICATIONS

Colour	Light grey with black, white, beige or grey surface.
Standard (sheets)	1270 x 2500 mm or customised as required Thickness: 25 or 50 mm (Available 10 - 100 mm) Custom kit options

PRODUCT SPECIFICATIONS

Product code	Thickness (mm)	Density (foam) (kg/m³)	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
Sorbermel GC 25	25	9	2500	1270	0.035	10%	120 kPa (min)	-40 to +150
Sorbermel GC 50	50							

Tolerances: Length: -0, +50 mm; Width: -0, +5 mm; Thickness: ± 2 mm; Density: ± 10%

**Supplied Untrimmed : means some surface coverings such as foils, film or fabric may overhang the ordered usable width. All above products are available with pressure-sensitive adhesive backing. Under extreme temperature conditions or where the substrate surfaces cannot be free from contaminants, mechanical fixing will be required on vertical surfaces. For all inverted installations including ceiling installations, mechanical fixing must be done in addition to PSA adhesion. Please consult your local Pyrotek representative for more information.*

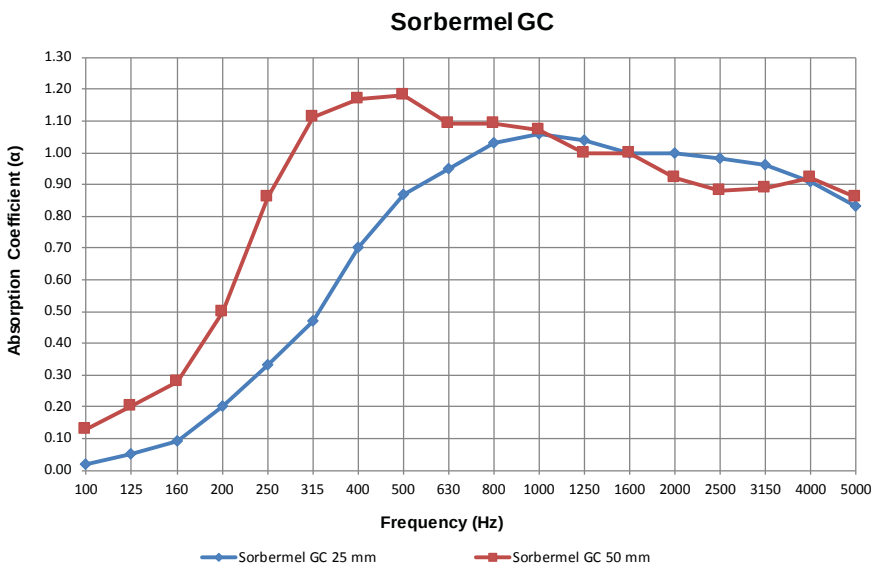
MATERIAL PROPERTIES

Test method	Description	Results	Report no.
IMO Res A 653(16) IMO Res MSC 61(67) Annex1 Part 5 and Annex 2	EC Certificate of Type Examination - 96/98/ EC Directive Module B	Complies *	Certificate No. 164.112/1121/WCL MED0267TE
AS/NZS 3837:1998	Test for heat & smoke release rates for materials & products using an oxygen consumption calorimeter.	Group 1*	FH 4999
UL94	Horizontal burn test for foam materials.	Complies.	15014BD
FMVSS-302	Automotive burn rate test.	Self extinguishing. Complies.	15014BD1

**Results apply to un-faced 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 Number: 301 & 302

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