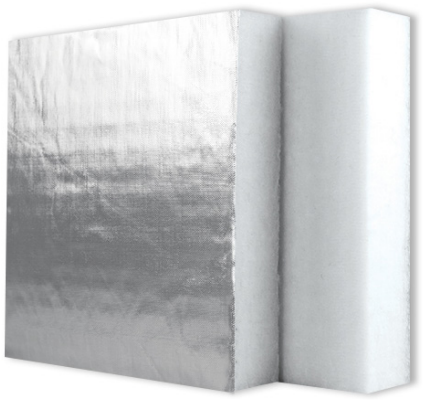
SORBERPOLY™ 2D AGC

polyester sound absorber with aluminium foil glass cloth facing



Sorberpoly™ 2D AGC is a polyester insulation product offering both sound absorbing and thermal insulation properties. The product is made from non-woven, ultrafine polyester fibres, faced with a durable, flame retardant Aluminium foil-covered Glass Cloth – 'AGC.'

The insulation base, Sorberpoly 2D, uses a horizontal lapping process to form a thick absorbent insulation medium of the polyester fibres. Sorberpoly 2D is fuel, oil and grease resistant, and is lightweight. It's inherently hydrophobic (non-wicking) and suited to high humidity applications.

The standard foil facing, AGC, is a flame retardant aluminium glass cloth with fire retardant adhesive, complying with the highest rating to EN 45545 rail standard and IMO Marine standard. It acts as a radiant barrier, and besides enhancing the fire and thermal insulation performance, it further protects the insulation base from mechanical stress, dirt, oil and liquid ingress.

The product is easy to use and can be used in cavities and voids within building structures, transport vehicles, trains and boats. It is also suitable to use in making baffle absorbers and office partitions.

Sorberpoly 2D AGC is a low irritant product. It is much easier for operators to use compared to fibreglass or mineral wool alternatives.

VOC, ODP, HEALTH AND SAFETY

Sorberpoly 2D AGC is non-toxic and safe to handle by methods prescribed in the Safety Data Sheet.

SPECIFICATIONS

Colour	White (polyester) with silver facing
Available	Various sizes available (depending on MOQ) Standard thicknesses: 25 and 50 mm (1 and 2 in) Also available: 6 to 100 mm thick (0.2 to 3.9 in)
	Custom kit options, custom sizes, colours, thicknesses and/or hydrophobic treatment available depending on MOQ

applications

- Rail carriages and locomotives
- Marine, truck and bus engine compartments, firewalls, bonnet liners, and cavity infill
- Hydraulic pump enclosures
- Machinery and equipment enclosures
- Compressor and generator set enclosures
- Noise control and thermal insulation for HVAC equipment
- Air-conditioning units and systems
- Acoustic panels

features

- Lightweight, with high sound absorption properties
- Complies to international standards with excellent fire and toxicity ratings
- Will not degrade, crumble or smell over time
- Non-toxic, will not irritate the skin when handled
- Compressible, easy to cut and install
- Non-wicking and hydrophobic - avoiding contamination and generation of odours
- Excellent thermal insulator with low thermal conductivity
- Long-term stability and performance even in dynamic applications
- Multiple assembly approaches are possible
- Light and heat-reflective impermeable facing
- Available with self-adhesive backing for ease of installation

PRODUCT SPECIFICATIONS

Standard thickness	Width[1]	Density[2]	Moisture absorption (WSS M99P32-B)	Maximum intermittent temperature[3]
25 mm (1 in)	1.4 m (4.6 ft)	18, 24, 32, 48 & 60 kg/m^3 (1.12, 1.5, 2, 3 & 3.75 lb/ft^3)	2% at 38 °C (100 °F) 98% RH (for 24 hrs) (Report No. 02015BD)	-50 to 130 °C (-58 to 266 °F)
50 mm (2 in)				

Tolerance: Thickness ± 2 mm (0.08 in); Density: ± 5%. Other densities and thicknesses available with varying rolls and sheet dimensions. 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.

[1]Useable width: Some surface coverings may overhang the useable width. [2]For plain polyester only. Commonly sold as 32, 48 & 60 kg/m3. Minimum order quantities may apply. [3]Higher temperatures can be suitable depending on the application.

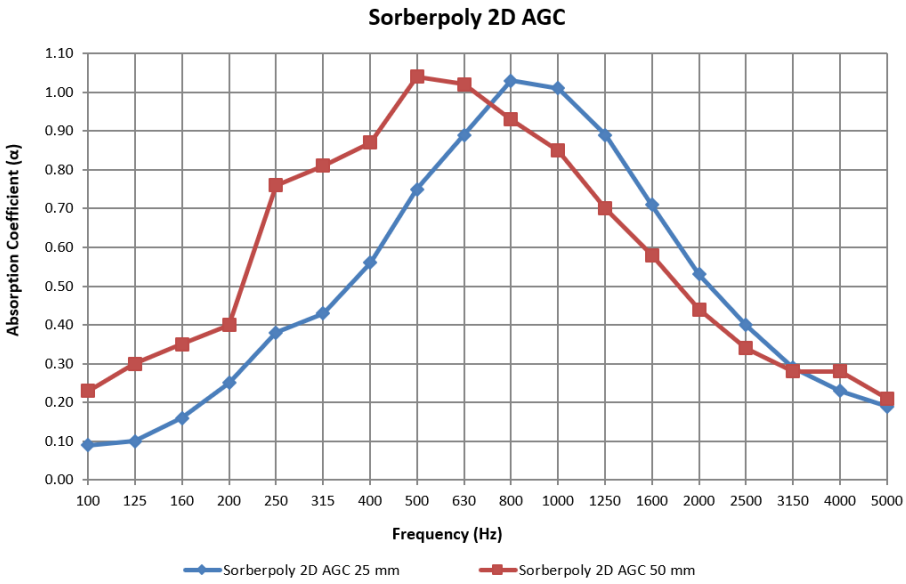
MATERIAL PROPERTIES

Test method	Property	Report no.	Results
AS 1530.3 1999*	Method for fire tests on building materials, components and structures	7-574373-CN	0,0,0,0-1
EN 45545-2 (ISO 5658-2)	Spread of flame	0186-25-F	R1 R7 (HL1, HL2, HL3) for 10 mm to 150 mm products (0.2 to 5.9 in)
EN 45545-2 (ISO 5660-1: 50 kWm^{-2})	Heat release rate by cone calorimeter		
EN45545-2 (ISO 5659-2: 50 kWm^{-2})	Smoke generation (optical density)		
EN45545-2 (EN 17084 (1): 50 kWm^{-2})	Gas Toxicity		
ASTM C518*	Thermal conductivity	DI0567/DU01	0.036 W/mK
BS 6853:1999*	Toxicity testing	2974/R1	R= 0.037
NF F 16-101	French standard test method for fire behaviour of rail or rolling stock. Complies with section 7.2.3 for Category A1, A2 and B rolling stock	18781-15A, 18801-15A	M1 F1
UL 94*	Flammability of plastic materials	06414JY	HF-1

**Results for Sorberpoly 2D*

ACOUSTIC PERFORMANCE

Frequency (Hz)	25 mm	50 mm
100	0.09	0.23
125	0.10	0.30
160	0.16	0.35
200	0.25	0.40
250	0.38	0.76
315	0.43	0.81
400	0.56	0.87
500	0.75	1.04
630	0.89	1.02
800	1.03	0.93
1000	1.01	0.85
1250	0.89	0.70
1600	0.71	0.58
2000	0.53	0.44
2500	0.40	0.34
3150	0.29	0.28
4000	0.23	0.28
5000	0.19	0.21
NRC	0.65	0.75
SAA	0.65	0.73
α_w	0.45 (M)	0.45 (LM)



Tested to ISO 354:2003 at University of Canterbury, New Zealand | Report Numbers: 303 & 304
Acoustic results based on 32 kg/m^3 density material

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