

# 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. It's 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 provides protection to 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.

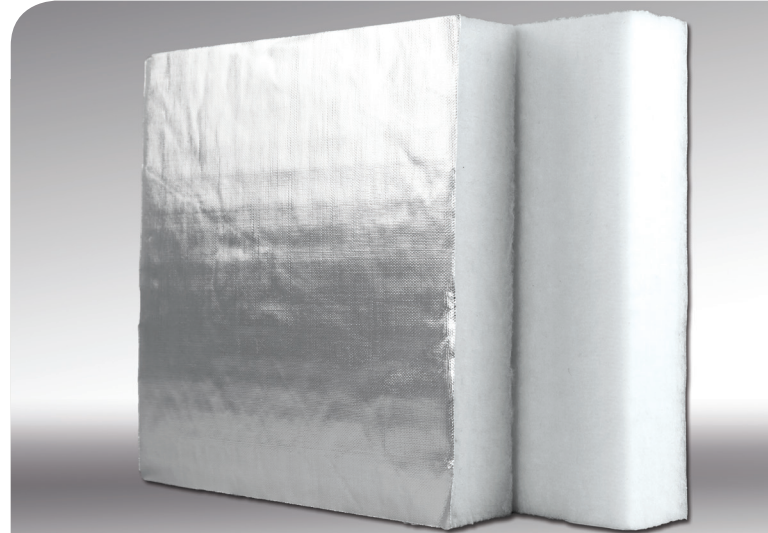
Sorberpoly 2D AGC is a low irritant product. It is much easier for operators to use compared to fibreglass or mineral wool alternatives.

### TOXICOLOGY/HEALTH AND SAFETY

Sorberpoly 2D AGC is completely non-toxic and safe to handle without protective clothing or respiration apparatus.

### SPECIFICATIONS

Colour	White with silver facing
Available	Various sizes available (Depending on MOQ) Standard thickness: 25 and 50 mm (1 to 2 in) <i>Also available: 6 to 100 mm thick (0.2 to 3.9 in)</i>
	Custom kit options also available



## 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
- Easy to cut
- Non-wicking and hydrophobic - avoids contamination and generation of odours
- Compressible
- Good thermal insulator with low thermal conductivity
- Long-term stability and performance even in dynamic applications.
- Multiple assembly approaches possible. Meets the needs of a variety of manufacturing and installation approaches.
- Light and heat reflective impermeable facing
- Available with self-adhesive backing for ease of installation

## PRODUCT SPECIFICATIONS

Standard thickness	Width <sup>1</sup>	Density <sup>2</sup>	Moisture absorption (WSS M99P32-B)	Operating temperature range <sup>3</sup>
25 mm (1 in)	1.4 m (4.6 ft)	18 to 32 kg/m <sup>3</sup> (1.12 to 2.0 lb/ft <sup>3</sup> )	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%. <sup>1</sup>Useable width: Some surface coverings may overhang the useable width. <sup>2</sup>For plain polyester only. <sup>3</sup>Higher temperatures can be suitable depending on the application. Other densities and thicknesses available with varying rolls and sheet dimensions. 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

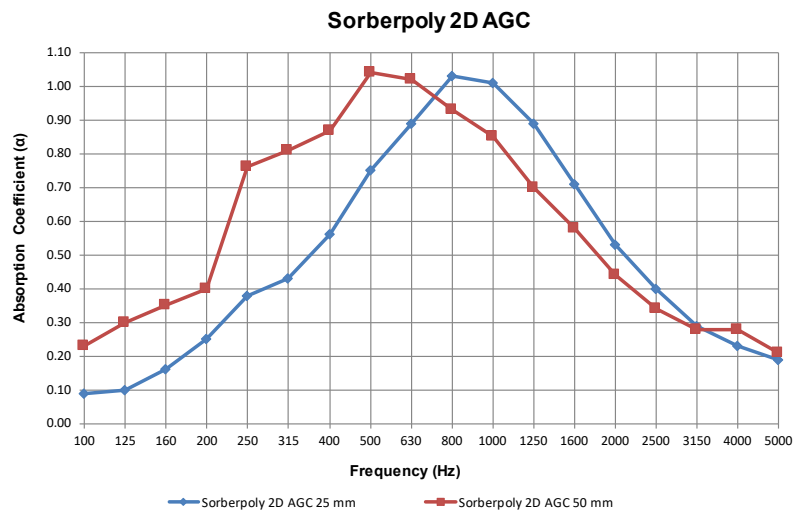
Test method	Property	Report no.	Results
AS 1530.3 1999*	Method for fire tests on building materials, components and structures	7-574373-CN	0,0,0-1
EN 45545-2 (ISO 5658-2)	Spread of flame	351270	R1 (HL1, HL2, HL3)
EN 45545-2 (ISO 5660-1: 50 kWm <sup>-2</sup> )	Heat release rate by cone calorimeter	350578	
EN45545-2 (ISO 5659-2: 50 kWm <sup>-2</sup> )	Smoke generation (optical density)	350580	
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
$\alpha_w$	0.45 (M)	0.45 (LM)

Tested to ISO 354:2003 at University of Canterbury, New Zealand  
Report Number: 303 & 304  
Acoustic results are based on 32 kg/m<sup>3</sup> density material



For further information and contact details, please visit our website [pyroteknc.com](http://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 NC 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](http://pyroteknc.com/disclaimer).

