

SORBERPOLY™ 2D GC

polyester sound absorber with glass cloth facing

Sorberpoly™ 2D GC acoustic insulation material is made from non-woven polyester fibres with a glass cloth facing. The product has excellent sound absorbing and thermal insulation properties.

Manufactured from 100% polyester fibres, Sorberpoly 2D is constructed using a specialised lapping process to form a thick absorbent medium. A glass cloth facing (GC) is thermally bonded to Sorberpoly 2D using a unique process resulting in maximum durability and acoustic performance.

The inherent properties of the GC facing makes the product suited to areas where high temperature and abrasion is experienced. The facing further protects Sorberpoly 2D from mechanical damage and dirt ingress.

Sorberpoly 2D GC can be used as a direct replacement for conventional fibreglass based products and traditional acoustic foam materials. It provides excellent thermal insulation, will not hold water and is considerably more durable than traditional acoustic foam.

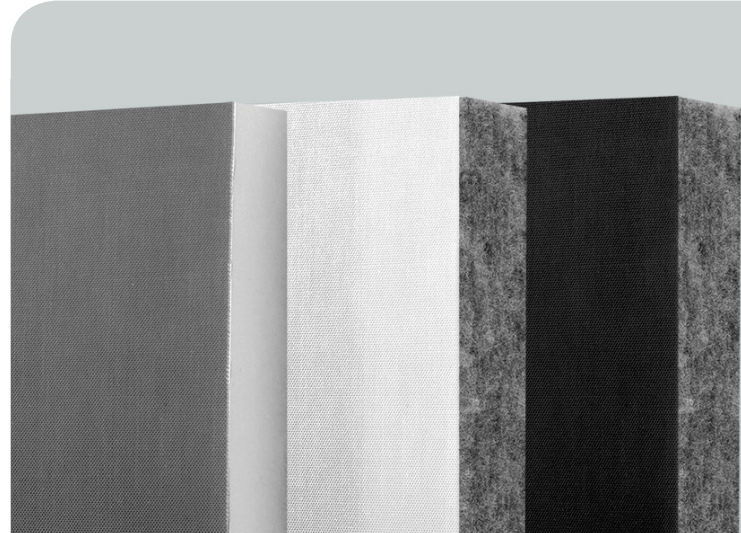
Sorberpoly 2D will not rot or smell; it has no organic binders or VOC. It is also non-toxic, and inherently hydrophobic (non-wicking) making it well suited to high humidity applications.

TOXICOLOGY/HEALTH AND SAFETY

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

SPECIFICATIONS

Colour	White or grey (Polyester) Facings available in grey, white or black
Available	Standard sheet size: 2200 x 1270 mm (untrimmed) 2200 x 1200 mm (trimmed) Thickness: 25 mm, 50 mm and 100 mm Other thicknesses and sizes available



applications

- Within wall cavities, and ceiling voids
- Transport - heavy duty trucks, bus, earthmoving & mining equipment, walls, roofs and firewalls
- Noise control and thermal insulation for HVAC equipment
- Hydraulic pump, compressor and generator set enclosures
- Acoustic baffles and panels
- Open areas requiring reverberation control

features

- High sound absorption properties and efficient thermal insulation
- Non-wicking and hydrophobic
- Will not degrade, crumble or smell over time
- Non-toxic and will not irritate the skin when handled
- Tough and durable facing - resistant to liquids, dusts and sprays
- Multiple assembly/custom kit options available
- Can be used as a replacement to fibreglass/mineral wool in areas subject to high humidity and condensing moisture
- Contains no resin binders which could create an unpleasant odour
- Available with self-adhesive backing for ease of installation



PRODUCT SPECIFICATIONS

Standard Thickness	Product size*		Operating temperature range**
	Length	Width	
25 mm (1 in)	2200 mm (87 in)	1270 mm (50 in)	-40 to 150 °C (-40 to 302 °F)
50 mm (2 in)			
100 mm (4 in)			

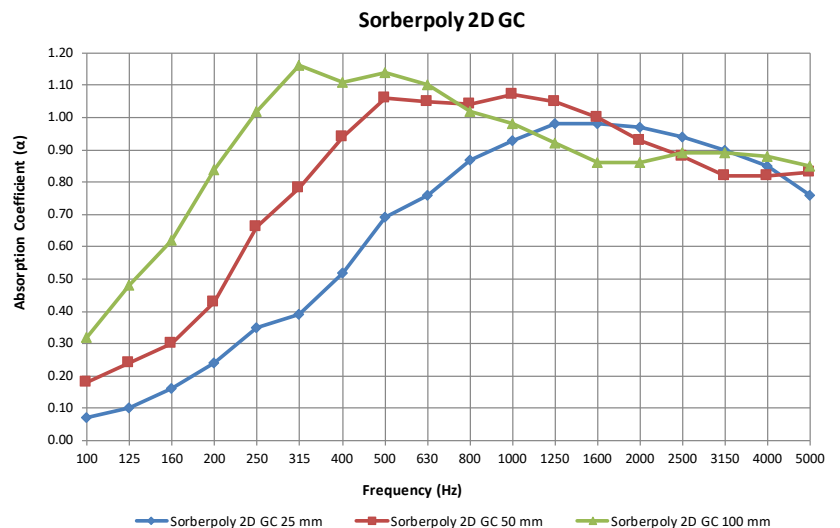
Tolerance: Thickness ± 2 mm (0.08 in); Density $\pm 10\%$; Width/length $\pm 10\%$; Other thicknesses and sheet sizes available on request. Other densities and thicknesses available with varying rolls and sheet dimensions. All above products are available with pressure-sensitive adhesive backing. Where the substrate surfaces cannot be free from contaminants or for extreme temperatures, mechanical fastening is required. For all inverted installations including ceiling installations, mechanical fixing must be utilised in addition to PSA adhesion. Please consult your local Pyrotek representative for more information. *Supplied untrimmed **Useable at higher temperatures when tested for suitability.

MATERIAL PROPERTIES

Product	Test method	Description	Report	Results
Sorberpoly 2D GC	AS 1530.3	Method for fire tests on building materials, components and structures.	7-582306-CN	0,0,0,3
Sorberpoly 2D	ISO 9705	Full-scale room test for resistance to fire on surface products	FI 5896-TT	NCC: Group 1 NZBC: Group 1-S
	ASTM C518	Thermal conductivity	DI0567/DU01	0.036 W/mK
	BS 6853	Toxicity testing	2974/R1	R= 0.037
	WSS M99P32-B	Moisture absorption	02015BD	2% at 38 °C, 98% RH for 24 hrs

ACOUSTIC PERFORMANCE

Frequency (Hz)	Sorberpoly 2D GC 25 mm	Sorberpoly 2D GC 50 mm	Sorberpoly 2D GC 100 mm
100	0.07	0.18	0.32
125	0.10	0.24	0.48
160	0.16	0.30	0.62
200	0.24	0.43	0.84
250	0.35	0.66	1.02
315	0.39	0.78	1.16
400	0.52	0.94	1.11
500	0.69	1.06	1.14
630	0.76	1.05	1.10
800	0.87	1.04	1.02
1000	0.93	1.07	0.98
1250	0.98	1.05	0.92
1600	0.98	1.00	0.86
2000	0.97	0.93	0.86
2500	0.94	0.88	0.89
3150	0.90	0.82	0.89
4000	0.85	0.82	0.88
5000	0.76	0.83	0.85
NRC	0.75	0.95	1.00
SAA	0.72	0.91	0.99
α_w	0.65 (MH)	0.90	0.95 (L)



Results based on 32 kg/m³ (2 lb/ft³) density
 Tested to ISO 354:2003 at University of Canterbury, New Zealand
 Report Number: 305, 306 & 346

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 acoustic, mechanical and fire engineer 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 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.

