

## SORBERPOLY™ 2D

### high-performance, non-woven polyester acoustic insulation

Sorberpoly 2D acoustic insulation is a fine fibre, non-woven polyester with excellent sound-absorbing and thermal insulation properties. The product is resistant to fuel, oil and grease - benefitting the long-lasting lifespan of the product when installed under recommended applications.

Sorberpoly 2D is lightweight and hydrophobic (non-wicking), making it suitable for high humidity applications. It is typically installed in cavities and voids in building structures, heavy transport vehicles, trains and large boats. The product is also suitable to use in making baffle absorbers or office partitions.

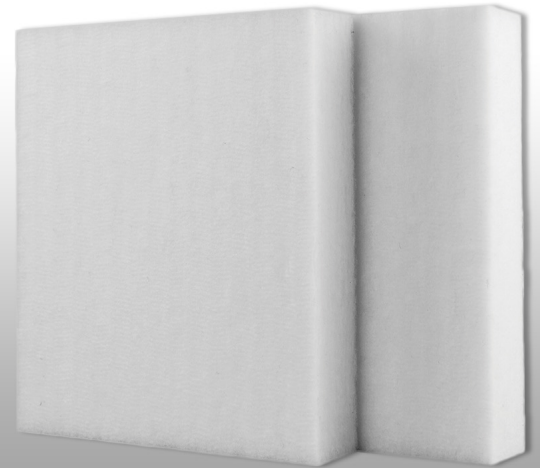
Being a low irritant product, it provides a safer and more comfortable product for operators to handle compared to fibreglass or mineral wool alternatives. Sorberpoly 2D is also easy to install by simply cutting using scissors or a retractable utility knife. If required, the product is available with various facing options to meet customer specification.

#### VOC, ODP, HEALTH AND SAFETY

Sorberpoly 2D is non-toxic and safe to handle by methods prescribed in the Safety Data Sheet. No ozone depleting substances are used during the manufacture of Sorberpoly 2D.

#### SPECIFICATIONS

Colour	White or grey
Available	Standard size: 2.2m x 1.4 m (7.2 ft x 4.6 ft) Standard thickness: 25 mm (1 in) & 50 mm (2 in)
	Available in sheets or rolls. Custom sizes and/or thicknesses available depending on MOQ.



#### applications

- Fills voids that can conduct noise from adjacent rooms or from outside to inside
- Marine bulkheads and deckheads including wall cavities and ceiling voids
- Noise control and thermal insulation for HVAC equipment
- Acoustic hanging baffles and acoustic wall panels
- Office infill partitions or open area reverberation control as a backing material

#### features

- Lightweight with high NRC values per thickness
- Recyclable - manufactured from 100% polyester fibre
- Will not degrade or crumble
- No unpleasant odour or mildew
- Non-toxic, will not irritate the skin when handled
- Easy to cut, heat seal, thermally or sonically weld and installed
- Non-wicking and hydrophobic - does not hold water, avoids contamination and generation of odours
- Compressible/thermally mouldable
- Available plain and with various surface coverings such as reinforced or perforated aluminium foil, metallised film, black non-woven polyester and other available on request
- Available in various densities, and product thicknesses
- Multiple assembly approaches are possible
- Efficient thermal insulation along with sound absorption
- Contains no resin binders to create an unpleasant odour or mildew
- Can be used as a replacement to fibreglass/mineral wool, in areas subject to high humidity and condensing moisture
- Available with self-adhesive backing for ease of installation



## PRODUCT SPECIFICATIONS

Standard thickness	Standard length	Standard width	Moisture absorption (WSS M99P32-B)	Density <sup>1</sup>	Operating temperature <sup>2</sup>
25 mm (1 in)	2.2 m (7.2 ft)	1.4 m (4.6 ft)	2% at 38 °C, 98% RH (for 24 hrs) (Report No. 02015BD)	18, 24, 32, 48 & 60 kg/m <sup>3</sup> (1.12, 1.5, 2, 3 & 3.75 lb/ft <sup>3</sup> )	-50 to 150 °C (-58 to 302 °F)
50 mm (2 in)					

Tolerance: Thickness ±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. Manufacture can vary by region. Product or parts may be manufactured under agreement with a third party, meeting general specifications listed within the technical datasheet. <sup>1</sup> Commonly sold as 32, 48 & 60 kg/m<sup>3</sup>. Minimum order quantities may apply. <sup>2</sup> Higher temperatures can be suitable depending on the application.

## MATERIAL PROPERTIES

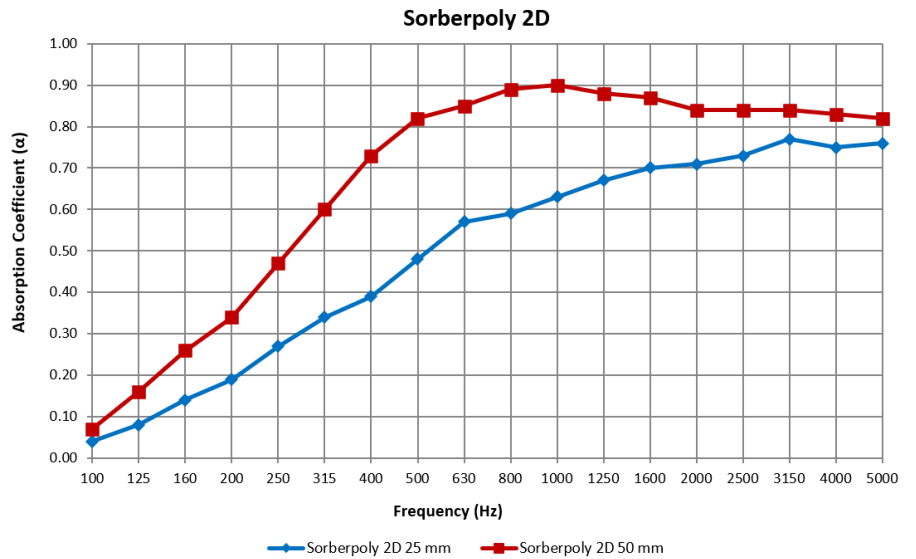
Test method	Property	Report no.	Results
AS 1530.3 1999	Method for fire tests on building materials, components and structures	7-574373-CN	0,0,0,0-1*
ASTM C518	Thermal conductivity	DI0567/DU01	0.036 W/mK
BS 6853	Toxicity testing	2974/R1	R= 0.037
UL94	Flammability of plastic materials	06414JY	HF-1
ASTM E84	Surface burning characteristics of building materials	105781826SAT-001	Class A (FSI:0, SDI: 20)

\*Results for 50mm material

## ACOUSTIC PERFORMANCE

Frequency (Hz)	Sorberpoly 2D 25 mm	Sorberpoly 2D 50 mm
100	0.04	0.07
125	0.08	0.16
160	0.14	0.26
200	0.19	0.34
250	0.27	0.47
315	0.34	0.60
400	0.39	0.73
500	0.48	0.82
630	0.57	0.85
800	0.59	0.89
1000	0.63	0.90
1250	0.67	0.88
1600	0.70	0.87
2000	0.71	0.84
2500	0.73	0.84
3150	0.77	0.84
4000	0.75	0.83
5000	0.76	0.82
NRC	0.50	0.75
SAA	0.52	0.75
$\alpha_w$	0.50 (H) D	0.75 C

Tested to ISO 354:2003 at University of Canterbury | Report Numbers: 323 & 324  
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 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).

