

SORBERPOLY™ 3D

high performance textile sound absorber

Sorberpoly™ 3D acoustic insulation is an ultra-fine fibre, non-woven polyester that has excellent sound absorbing and thermal insulation properties, useful in high humidity applications. It is also fuel, oil and grease resistant.

Manufactured from 100% polyester fibre, Sorberpoly 3D is recyclable and environmentally friendly and is lightweight, hydrophobic (non-wicking) and easily cut, using scissors or a sharp knife.

Sorberpoly 3D uses a patented vertical lapping system employing ultra-fine polyester fibres to deliver excellent sound absorbing and thermal properties. The vertical lapping system provides resiliency to maintain high loft, important to maximising sound absorption.

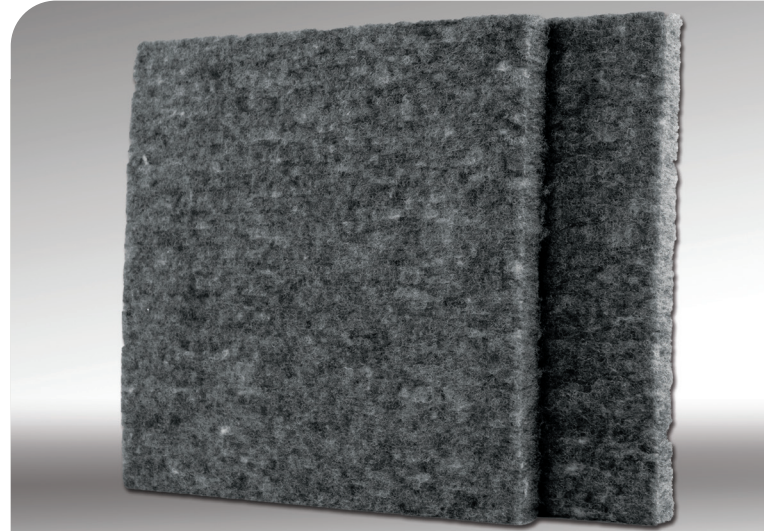
When compared to insulation of comparable acoustic performance, Sorberpoly 3D is nearly half the weight of other absorbing mediums like foam, rockwool and fibreglass and meets the needs of a variety of manufacturing and installation approaches.

TOXICOLOGY/HEALTH AND SAFETY

Sorberpoly 3D is completely non-toxic and safe to handle without protective clothing or respiration apparatus.

SPECIFICATIONS

Colour	Grey or black and others upon request Available with various surface coverings such as plain, reinforced or perforated aluminium foil, metallised film, black non-woven polyester, aluminium glass cloth and other available on request
Standard (rolls, sheets)	1450 x15m or 30m or custom as required Thickness: 20 mm (Available 6 - 100 mm) Custom kit options



applications

- Fill voids behind panels, and in cavities, e.g. wall cavities, ceiling voids
- Heavy duty truck, bus, earthmoving & mining equipment, wall, roof and firewalls
- Noise control and thermal insulation for HVAC equipment
- Compressor and generator set enclosures
- Acoustic baffles
- Acoustic panels
- Hydraulic pump enclosures
- Open area reverberation control, as a backing material

features

- Lightweight, with high sound absorption properties
- Will not degrade, crumble or smell over time
- Non toxic, will not irritate the skin when handled
- Easy to cut, heat seal, thermally or sonically weld and install
- Non-wicking and hydrophobic
- Compressible, thermally mouldable
- Available in various densities, and product thicknesses
- Multiple assembly approaches possible
- Available with self-adhesive backing for ease of installation
- Efficient thermal insulation along with sound absorption – Saves energy and money
- Can be used as a replacement to fibreglass/rockwool, in areas subject to high humidity and condensing moisture.
- Contains no resin binders to create an unpleasant odour or mildew



PRODUCT SPECIFICATIONS

Product name	Standard thickness (mm)	Density (kg/m ³)	Roll length (lm)	Roll width (mm)	Moisture absorption** WSS M99P32-B	Thermal conductivity (w/mk at 15°C) ISO 8302-1991	Recommended service temperature °C
Sorberpoly 3D 25	25	24	30	1450	2% at 38°C, 98% RH (for 24 hrs) Report No. 02015BD	0,0399 (Report No. DI0519/DU01)	80°C Continuous 110°C Intermittent
Sorberpoly 3D 50	50		10				

Tolerance: Thickness +/- 2mm; *Useable width: Some surface coverings may overhang the useable width. Other densities and thicknesses available with varying rolls and sheet dimensions. Please contact your local Pyrotek representative for other requirements.

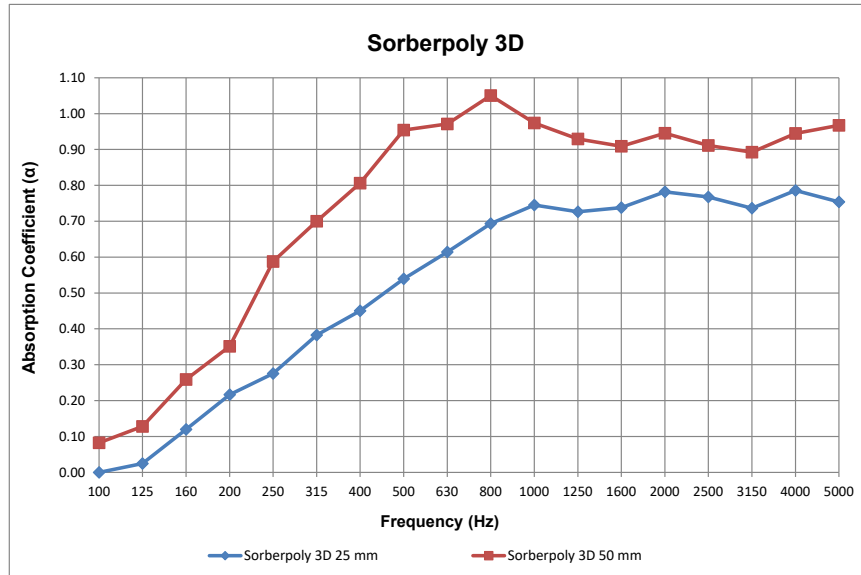
All above products are available with pressure-sensitive adhesive backing. Under extreme temperature and humidity conditions, air flow or where the substrate surfaces cannot be free from contaminants, mechanical fixing will be required. For all inverted installations including ceiling installations, mechanical fixing must be done in addition to pressure sensitive adhesive. Please consult your local Pyrotek representative for more information.

MATERIAL PROPERTIES

Test method	Index	Report no.	Results
AS 1530.3	Ignitability, flame propagation, heat and smoke release	7-560990-BV	8, 0, 1, 4
FMVSS 302	Flammability of interior materials	26016BD	Complies to the requirement of US (DOT Department of Transportation for occupant compartments of motor vehicles

ACOUSTIC PERFORMANCE

Frequency (Hz)	25 mm	50 mm
100	0.00	0.08
125	0.02	0.13
160	0.12	0.26
200	0.22	0.35
250	0.28	0.59
315	0.38	0.70
400	0.45	0.81
500	0.54	0.95
630	0.61	0.97
800	0.69	1.05
1000	0.75	0.97
1250	0.73	0.93
1600	0.74	0.91
2000	0.78	0.95
2500	0.77	0.91
3150	0.74	0.89
4000	0.79	0.94
5000	0.75	0.97
NRC	0.60	0.85
SAA	0.58	0.84
α_w	0.55 (H)	0.85



Tested to ISO 354:2003 (1/4 sized room)
Report Number: 25916AR

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 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 www.pyroteknc.com/disclaimer.

