

# SORBERPOLY™ 3D NW

## polyester sound absorber with polyester non-woven facing

Sorberpoly™ 3D NW was developed in response to the demand for an environmentally resistant, economic, lightweight, sound absorbing insulation.

Sorberpoly 3D NW finds extensive use as a lightweight, high-performance sound absorption material in the marine, HVAC and white goods markets.

The product provides excellent NRC values at substantially reduced weight compared to other textile-based foam, and fibreglass absorptive solutions.

Sorberpoly 3D NW does not wick or retain water. This prevents the development of odours and corrosion on metal substrates associated with water contamination.

For the convenience of Original Equipment Manufacturers (OEM), the product can be cut to size on our CNC cutting machinery. For in-house cutting, fabricators can use scissors, electro-mechanical rotating equipment, or reciprocating blade cutters.

Pyrotek's focus is on innovation and technology. This resulted in a product that offers high sound absorption combined with excellent mechanical and physical properties.

### TOXICOLOGY/HEALTH AND SAFETY

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

### SPECIFICATIONS

Colour	Grey or Black - other colours available upon request
Available	Width: 1450 mm Roll length: 15 m, 30 m or custom depending on MOQ Thickness: 14 mm, 25 mm and 50 mm (Available 6 - 100 mm)
	Custom kit option available



### applications

- Noise control and thermal insulation for HVAC and other OEM equipment
- Machinery and equipment enclosures
- Compressor and generator set enclosures
- Air-conditioning units and systems
- Rail industry - train carriage interior
- Hydraulic pump enclosures
- Office and open area reverberation control in building interiors, as a backing material

### features

- Premium sound absorption properties
- Available in a range of thicknesses
- Pressure sensitive acrylic adhesive backing (optional)
- Easy to install
- Non wicking - avoids contamination and generation of odours
- Non-toxic, non-irritant and non-allergenic
- Long-term stability and performance even in dynamic applications
- Environmentally friendly (>50% regenerated fibre content)
- Higher NRC/weight ratio than competitive materials
- Manufactured from 100% polyester fibre
- Can be moulded to special shape requirements
- Does not hold water
- Can be used as an acoustic foam replacement in areas subject to high humidity and condensing moisture
- Contains no resin binders to create an unpleasant odour

## PRODUCT SPECIFICATIONS

Product name	Standard thickness (mm)	Density (kg/m <sup>3</sup> )	Roll length (lineal m)	Roll width (mm)	Moisture absorption* WSS M99P32-B	Thermal conductivity (W/mK at 15 °C) ISO 8302-1991	Operating temperature (°C)
Sorberpoly 3D NW 14	14	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 NW 25	25		30				
Sorberpoly 3D NW 50	50		15				

\*For plain polyester only

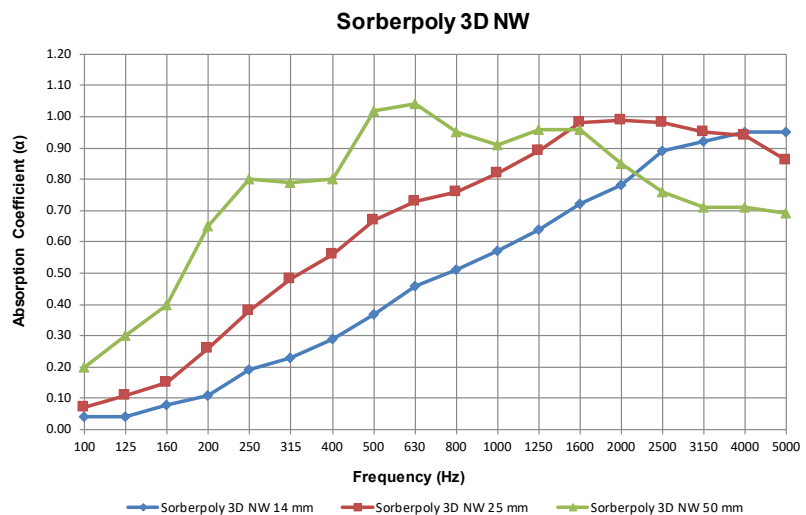
All above products are available with pressure-sensitive adhesive backing. Under extreme temperature and humidity conditions, air flow or where the substrate surfaces cannot be free from contaminants, mechanical fixing will be required. For all inverted installations including ceiling installations,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

## MATERIAL PROPERTIES

Test method	Property	Report no.	Results
ISO 9705	Full-scale room test for resistance to fire on surface products	50765300.1	BCA: Group 1, NZBC: Group 1-5
ASTM E84	Surface burning characteristics of building materials	d9735.01-121-24-r0	Class A
ASTM E162	Surface flammability	101731845MID-001a	Complies for US (FRA) Federal railroad administration requirements and requirements of NFPA 130 Complies for US (DOT) Department of transportation requirements for acoustic insulation of transit bus and vans (Docket 90A)
ASTM E662	Optical density of smoke generated	101731845MID-002a	
ASTM E800 (SMP-800C)	Gases present or generated during fires	101731845MID-003a	
AS 1530.3 1999	Ignitability, flame propagation, heat and smoke release	7-516525-BV	9/0/1/4
UL94	Flammability of plastic materials	-	HBF
FMVSS-302	Flammability of interior materials	-	Self extinguishing

## ACOUSTIC PERFORMANCE

Frequency (Hz)	14 mm	25 mm	50 mm
100	0.04	0.07	0.20
125	0.04	0.11	0.30
160	0.08	0.15	0.40
200	0.11	0.26	0.65
250	0.19	0.38	0.80
315	0.23	0.48	0.79
400	0.29	0.56	0.80
500	0.37	0.67	1.02
630	0.46	0.73	1.04
800	0.51	0.76	0.95
1000	0.57	0.82	0.91
1250	0.64	0.89	0.96
1600	0.72	0.98	0.96
2000	0.78	0.99	0.85
2500	0.89	0.98	0.76
3150	0.92	0.95	0.71
4000	0.95	0.94	0.71
5000	0.95	0.86	0.69
NRC	0.50	0.70	0.90
SAA	0.48	0.71	0.87
$\alpha_w$	0.40 (H)	0.65 (H)	0.85



Tested to ISO 354:2003 at University of Canterbury, New Zealand  
Report Number: 315, 316 & 317

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 or mechanical 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.  
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