

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 ³) | 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 | | | | |

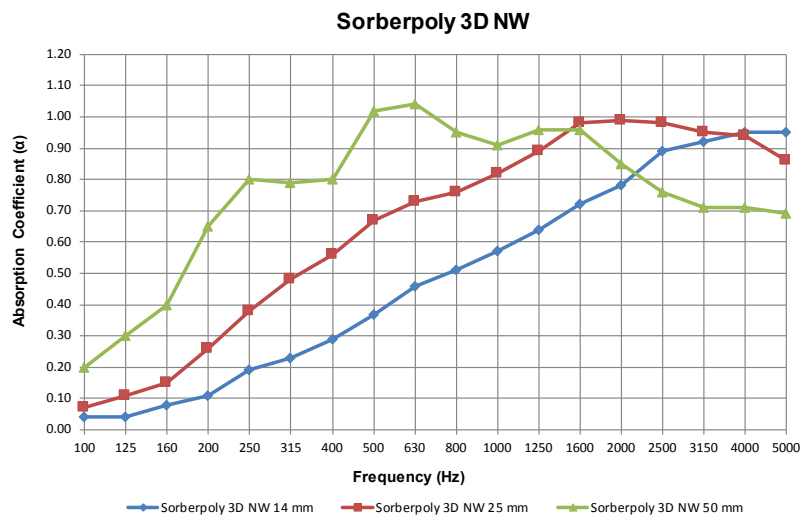
*For plain polyester only

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-S |
| 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 |
| α_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

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.

