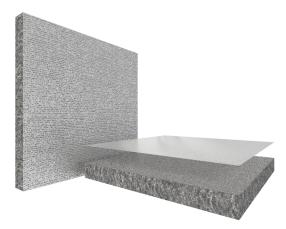




235IP 08/12 Sorberpoly<sup>™</sup> 3D ALR Information Page

# **Reinforced Aluminium Foil Faced Acoustic Textile**



Sorberpoly™ 3D ALR is a reinforced aluminium foil faced 3D polyester acoustic fabric with low flammability and smoke emission designed for marine, HVAC and industrial applications.

The unique thermally bonded fibre construction and advanced laminating technology used to make **Sorberpoly 3D ALR** results in high sound absorption performance, combined with unique mechanical properties.

The reinforced aluminium foil provides a light, heat reflective, flame resistant facing which protects the 3D composition from ingress of dust, oil and other contaminants.

**Sorberpoly 3D ALR** does not wick or retain water hence it does not encourage the development of smells associated with water contamination or provide a source of moisture to promote corrosion on metal substrates.

The fibre base used in **Sorberpoly 3D ALR** is extremely stable and will not break down if exposed to water immersion or constant high humidity. Unlike some mineral fibre systems, the **Sorberpoly 3D ALR** fibre base is extremely well bound, preventing fibre shedding, and break down under constant dynamic loading.

### **FEATURES**

- · Lightweight, with high NRC values per thickness
- Recyclable, manufactured from 100% polyester fibre
- Non-wicking and hydrophobic (Self draining does not hold water
- User friendly no protective clothing required
- Non-toxic, non-irritant and non-allergenic
- Light and heat reflective impermeable facing
- Environmentally friendly
- Available with other surface coverings such as plain, reinforced or perforated aluminium foil, metallised film, black non-woven polyester and other available on request
- Available in thicknesses from 6 to 100mm
- Choice of three high performance self adhesives for ease of installation (See page 2)
- Contains no resin binders to create an unpleasant odour
- · Low installation cost

### **APPLICATIONS**

- Marine, truck and bus engine compartments, firewalls and bonnet liners
- Hydraulic pump enclosures
- · Machinery and equipment enclosures
- · Compressor and generator set enclosures
- Noise control and thermal insulation for HVAC equipment
- · Air-conditioning units and systems
- Acoustic baffles
- Acoustic panels
- · Office and open area reverberation control

## TOXICOLOGY/HEALTH AND SAFETY

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

#### PRODUCT SPECIFICATIONS

STANDARD PRODUCT	THICKNESS (mm)	DENSITY (kg/m³)	ROLL LENGTH (Lineal metres)	ROLL WIDTH* (mm)
Sorberpoly 3D ALR 25	25	24	30	1450
Sorberpoly 3D ALR 50	50	24	10	1450

Tolerance: Thickness +/-2mm; \*Useable width: Some surface coverings may overhang the useable width.

#### **SELF ADHESIVE TAPES SPECIFICATIONS**

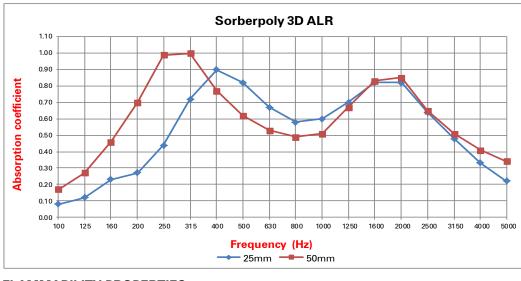
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CODE	DESCRIPTION	OPERATING SERVICE TEMPERATURE	PRODUCT NAME* (e.g. for 25mm product)	
	Premium high performance transfer tape suitable for most applications		Sorberpoly 3D ALR25 <b>A</b>	
Alpha – <b>A1</b>	Versatile, resilient, high tack adhesive with excellent bonding strength to a wide range of substrates	-10 to 80°C	Sorberpoly 3D ALR25 <b>A1</b>	
	Scrim reinforced acrylic backing for extra strength and high durability		Sorberpoly 3D ALR25 <b>A2</b>	

<sup>\*</sup>When ordering products with adhesive backing, please specify your choice of tape with the appropriate code A, A1 or A2 as listed in the column. Unless otherwise stated, the standard adhesive backing supplied is premium grade (Alpha - A).

### **MATERIAL PROPERTIES**

RECOMMENDED MAX SERVICE TEMPERATURE	MOISTURE ABSORPTION (WSS M9932-B)	THERMAL CONDUCTIVITY (ISO-8302-1991)
80°C Continuous	<0.04% by Vol. At 50°C and	0.033 W/mK
110°C Intermittent	90% RH (for 4 days or more)	(Report No. 7-558071-MV)

# **ACOUSTIC PERFORMANCE** (AS ISO 354 RMIT)



Frequency	25	50
(Hz)	mm	mm
100	0.08	0.17
125	0.12	0.27
160	0.23	0.46
200	0.27	0.70
250	0.44	0.99
315	0.72	1.00
400	0.90	0.77
500	0.82	0.62
630	0.67	0.53
800	0.58	0.49
1000	0.60	0.51
1250	0.70	0.67
1600	0.82	0.83
2000	0.82	0.85
2500	0.64	0.65
3150	0.48	0.51
4000	0.33	0.41
5000	0.22	0.34
NRC	0.70	0.75

# **FLAMMABILITY PROPERTIES**

TEST METHOD	INDEX	RESULTS	DESCRIPTION	
	Ignitability	0		
AS 1530.3 1999	Spread of Flame	0	Method for fire tests on building materials, components and structures.	
(Report No. 7-577826-CN)	Heat evolved	0		
	Smoke Developed	2		
BS 476 Part 6 1989 +A1 : 2009 (Report No. 195780)	Fire Propagation Index, I	7.9	Fire propagation for products.	
	Sub Index i1	5.5		
	Sub Index i2	1.9		
	Sub Index i3	0.5		
BS 476: Part 7: 1997	Class1			
(Report No. 195781)	Class2	Class 1	Classification of the surface spread of flame.	
	Class3		·	
FMVSS-302	Burn Rate - mm/min	Self Extinguishing	Automotive burn rate test.	

Caveats: Specifications are subject to change without notice. The data in this document are 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 Mc 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 are required to the product of the produ

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<sup>(</sup>For details on properties of the classified self adhesive tapes and installation of PSA backed products, refer document 'PSA Tapes - 525IP' on our website www.pyroteknc.com)