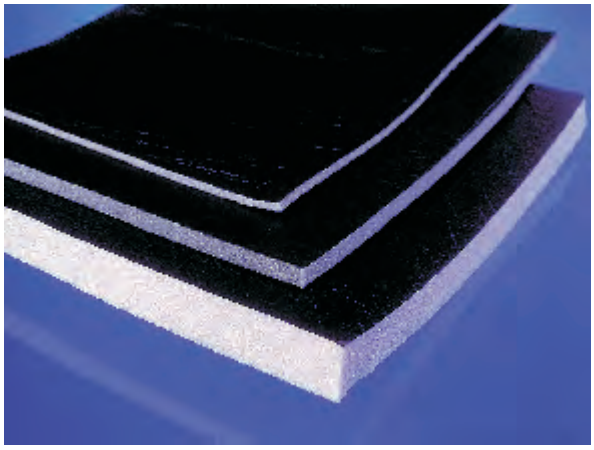
Polyurethane Film Faced Acoustic Foam



Sorberfoam PU is a combustion modified flexible polyether polyurethane foam with a tough, extensible, tear resistant polyurethane film facing.

The facing is applied by using a sophisticated process that optimises flow resistivity and maximises the sound absorption. It also acts as a protective facing in environments where liquids, sprays or dust will contaminate un-faced materials.

Sorberfoam PU is a premium and economical alternative to other foam materials.

Sorberfoam PU is hydrolysis resistant. It is especially suited for use in wet and humid areas. It is particularly suited for use in marine and tropical environments.

It should be selected in preference to any polyester polyurethane foam based products as these degrade rapidly due to the effect of hydrolysis.

FEATURES

- High performance acrylic pressure sensitive adhesive backing available*
- Maximum sound absorption for minimum thickness
- Combustion Modified
- Flexible
- Easily cut, shaped, fabricated and installed
- Does not shed irritating fibres
- Cut or moulded parts are available to customer requirements

APPLICATIONS

- Machinery and equipment enclosures
- Compressor and generator set enclosures
- Boat engine compartments
- Air conditioners
- Buses, trucks and cars- underbonnet insulation and interior sound absorption
- Headlining
- Electronic and electrical equipment
- Wall and ceiling linings for plant and equipment rooms.

BENEFITS

- Low installation cost
- Long service life
- Optimum performance
- Clean to handle
- Easy to cut
- Resists liquids, dusts and spray
- Resesists hydrolysis - will not rot

* Application precautions

- Surfaces must be smooth, clean and free from grease, loose or flaking paint, dirt, and contaminants.
- Surfaces can be cleaned with a solvent based cleaner before applying the product
- Pressure should be used when applying to any surface
- Adhesion tests are recommended for powder coated surfaces
- Aging trials should be performed on plasticised PVC

COLOUR SELECTION

- Colour - Black. Other colours available refer to your Pyrotek contact for information.
- Matching self-adhesive film tape is available for sealing joins and edges of foam.

SPECIFICATIONS

STANDARD PRODUCTS	THICKNESS	ROLL LENGTH (Metres)
SORBERFOAM F	4mm	30m
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SORBERFOAM F	6mm	30m
SORBERFOAM F	6mm	30m
SORBERFOAM F	12mm	30m
SORBERFOAM F	12mm	30m
SORBERFOAM F	25mm	30m
SORBERFOAM F	25mm	30m
SORBERFOAM F	50mm	15m
SORBERFOAM F	50mm	15m

*A ending denotes Pressure Sensitive Adhesive Backed
All Rolls supplied at 1400mm useable width.

SOUND ABSORPTION (Tested to AS1045-1988 Reverberation Room at RMIT)

FREQUENCY	RANDOM INCIDENCE ABSORPTION COEFFICIENT		
Hz	SORBERFOAM F12	SORBERFOAM F25	SORBERFOAM F50
100	0.00	0.05	0.15
125	0.00	0.10	0.25
160	0.05	0.15	0.40
200	0.05	0.20	0.40
250	0.10	0.30	0.60
315	0.15	0.40	0.90
400	0.20	0.50	1.05
500	0.25	0.70	1.20
630	0.40	0.75	1.20
800	0.50	0.95	1.20
1000	0.65	1.00	1.15
1250	0.75	1.10	1.15
1600	0.90	1.10	1.10
2000	1.00	1.10	1.05
2500	1.05	1.05	1.05
3150	1.05	0.90	1.10
4000	1.00	0.90	1.05
NRC(250-2000 Hz)	0.50	0.76	1.00

FLAMMABILITY PROPERTIES

MATERIAL	UL94	MVSS-302	SAEJ369a	LIMITING OXYGEN INDEX ISO 4589.2-1996
SORBERFOAM F	HF-1	Self Extinguishing	Self Extinguishing	24.9

*AWTA Report: 7-547912-CV

MECHANICAL PROPERTIES

MATERIAL	DENSITY	TEAR RESISTANCE	TENSILE STRENGTH	ELONGATION
SORBERFOAM F	28-32kg/m^3	450N/m (min.)	0.1MPa (min.)	200% (min.)

MISCELLANEOUS PROPERTIES

MATERIAL	COLOUR	RECOMMENDED MAXIMUM SERVICE TEMP.	THERMAL CONDUCTIVITY
SORBERFOAM F	BLACK	140C	0.033W/mC

CHEMICAL RESISTANCE

MATERIAL	ACETONE	MEK	PETROL	DIESEL	10% HCL SOLUT.	10% NaOH Solution	Carbon tetra-chloride
SORBERFOAM F	Swells*	Swells *	Good	Good	Poor	Very poor	Good

* Swells and then returns to normal on drying.

NOTES: Specifications are subject to change without notice.
The data listed in this data sheet are typical or average values based on tests conducted by independent laboratories or by the manufacturer. They are indicative only of the results obtained in such tests and should not be considered as guaranteed maximums or minimums. Materials must be tested under actual service to determine their suitability for a particular purpose.
The conclusions drawn from acoustic test results are as interpreted in writing by qualified independent testing authorities. Even so always seek the opinion of your own acoustic engineer as to the meaning of any data presented by the manufacturer as it is applied to any given project or use.

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