Text to Samples

Sound absorption materials.

P19/A14/F01

1) Self-adhesive backed Polyurethane foam with cleanable aluminised film facing to resist the ingress of moisture and dust.

P19/A14/F02

2) Self-adhesive backed Polyurethane foam with black polyurethane film facing. Good resistance to fuel oils and chemicals protects against ingress of moisture and dust.

P19/U18/F02

3) Self-adhesive backed polyester fibre with black polyurethane facing. Base material is low smoke and toxicity emitting in a fire situation.

P19/A14/F03

4) Self-adhesive backed Polyurethane foam with a charcoal coloured facing of Tedlar ®Film suitable for use in hostile environments. Shows excellent resistance to chemicals.

P19/U18/F03

5) Self-adhesive backed Polyester fibre with a Tedlar ® Film suitable for use in hostile environments. Shows excellent resistance to chemicals.

P19/I01/F02

6) Self-adhesive backed Non Combustible Polyurethane foam for use in high fire risk areas. Faced with black Polyurethane film for moisture & dust protection.

P19/I01/F03

7) Self-adhesive backed Non Combustible Polyurethane foam for use in high fire risk areas. Faced with Tedlar ® Film suitable for use in hostile environments. Shows excellent resistance to chemicals.

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Text to Samples

Materials for the reduction of sound transmission

P15/D05

8) Self-adhesive backed polymeric High Mass noise barrier.
Increases transmission loss & decreases vibration.

P15/D05/A14/F02

9) Noise problem composite containing High Mass barrier for transmission loss & absorption layer. For use in areas requiring reduction at high & low frequency.

P15/D05/U18/F02

10) Self-adhesive backed Noise problem composite containing High Mass barrier for transmission loss & absorption layer. For use in areas requiring reduction at high & low frequency.
Base material is polyester fibre with black polyurethane facing low smoke and toxicity emitting in a fire situation.

P15/D05/A14//F03

11) Noise problem composite containing High Mass barrier for transmission loss & absorption layer. For use in areas requiring reduction at high & low frequency. with a charcoal coloured facing of Tedlar ® film suitable for use in hostile environments.Shows excellent resistance to chemicals.

P15/D05/U18/F03

12) Self-adhesive backed Noise problem composite containing High Mass barrier for transmission loss & absorption layer. For use in areas requiring reduction at high & low frequency with a charcoal coloured facing of Tedlar ® Film suitable for use in hostile environments. Shows excellent resistance to chemicals.

Pete Stocks
New Product Manager and Insulation Sales

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MATERIAL CODE : F03

PRODUCT DATA

Description :

F03 is a Tedlar Film for facing material in very hostile conditions.

Base Polymer:

Poly Vinyl Fluoride

Scope of Supply:

Cut from a roll in linear metres - Roll width 1000mm - Generally bonded to substrate materials.

Applications:

Facing material resistant to chemicals, solvents and staining, it is extremely flexible and fatigue resistant with an outstanding temperature range of -100°F to 225°F (-73°C to 107°C).

Further data is available on request.

Sample

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Typical Physical Properties :

PROPERTIES	TEST METHOD	UNITS OF MEASURE	TYPICAL VALUE
AREA FACTOR		FT^2/lb M^2/KG	87 17.8
ULTIMATE TENSILE STRENGTH	Instrol ASTM D-882-80 Method A - 100% Min	kpsi Mpa	8 55
TENSILE MODULUS (MD)	Instrol ASTM D-882-80 Method A - 10% Min	kpsi MPa	305 2,103
ULTIMATE ELONGATION MIN (MD)	Instrol ASTM D-882-80 Method A - 100% Min	%	90
BURSTING STRENGTH	Mullen ASTM D-774-67 (1971)	psi/mil Mpa/m	28.9 7,845
TEAR STRENGTH PROPAGATING (MD)	Elmendorf ASTM D-1922-67 (1978)	g/mil kN/m	23.1 8.9
TEAR STRENGTH PROPAGATING (TD)	Elmendorf ASTM D-1922-67 (1978)	g/mil kN/m	18.6 7.2
TEAR STRENGTH INITIAL (MD)	Graves ASTM D-1004-66 (1981)	g/mil kN/m	333 129
TEAR STRENGTH INITIAL (TD)	Graves ASTM D-1004-66 (1981)	g/mil kN/m	264 102
IMPACT STRENGTH	Spencer ASTM D-3420-80	in.lb/mil jJ/m	9.6 42.7
SPECIFIC GRAVITY	ASTM D-1505-68 (1979)		1.46
COEFFICIENT OF FRICTION FILM/METAL	ASTM D-1894-78		0.18
COEFFICIENT OF ABRASION	ASTM D-658-81		385
MOISTURE ABSORPTION	ASTM D-570-81	%	7.6
MOISTURE VAPOR TRANSMISSION	ASTM E-96E-80	$g/m.^2d$	24.5

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MATERIAL CODE : F02

PRODUCT DATA

Description :

Polyurethane film showing high abrasion resistance, flexibility, resistance to oils, greases and solvents. It has good resistance to weather/radiation energy and also liquids, but retaining high water vapour permeability.

Base Polymer:

Polyesterurethane Ester

Colour: Black

Application:

Backing film for porous materials to allow vacuum forming as facing material in direct moulding application and as facing material in hostile environments. Good resistance to soiling, penetration of liquids and degradation used as protective backing to Elastomer/Foam materials to avoid water ingress.

Sample

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Typical Physical Properties :

PROPERTIES	TEST METHOD	UNITS OF MEASURE	TYPICAL VALUE	TOLERANCE RANGE
GRADE			2102	
DENSITY	DIN 53479	G/CM^3	1.23	
MELTING RANGE	SKALPEL METHOD	°C		133-145
WATER VAPOUR TRANSMISSION [$g/(m^2 \times 24\ h)$] 23°C/85% r F	DIN 53122		80	
SHORE A HARDNESS	DIN 53505		93	
TENSILE STRENGTH AT BREAK		N/MM^2	70	
ELONGATION AT BREAK	DIN 53455	%	430	
TEAR PROPAGATION RESISTANCE	DIN 53515	N/MM^2	75	
TENSION AT 50% ELONGATION	DIN 53455	N/MM^2	9	

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MATERIAL CODE : F01

PRODUCT DATA

Description :

Metallized polyester film for oxygen and moisture barrier, giving a good quality finish when applied to foam slabstock.

Base Polymer:

Polyester/Melinex

Fire Specification:

Underwriters Laboratories UL94

Scope of Supply:

From roll bonded to substrate in linear metres - Roll width 1400mm

Application:

Moisture barrier for facing of absorbent panels, typically for Pump Enclosures and Engine Rooms, it is not for close fit to engines or hot surfaces. Food industry application requires FDA 21 CFR 177.1630 and BGA Emfehlung XV11 standards for food contact.

Sample

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Typical Physical Properties :

RAW MATERIAL	General purpose grades of polyester film complying with FDA 21 CFR 177.1630 and BGA Emfehlung XV11 s
YIELD	59 m^2/Kg 31 m^2/Kg
OXYGEN BARRIER	Typical Range 0.5 - 0.8cc/m^2/24 hrs/1 atmos Limit 98% < 1.0 cc/m^2/24 hrs/1 atmos (Test Method: Mocon Oxtran 23°C 0% RH)
MOISTURE BARRIER	LIMIT 98% < 0.2 g/m^2/24 hrs (Test Method: Laminated to 50 micron LDPE EPS Dynamic 23°C 85% RH)
OPTICAL DENSITY	Typical Range 2.5 - 3.0
METAL ADHESION	100% on standard adhesive tape test (DRG Sellotape Ref 1112)

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MATERIAL REFERENCE : A14

PRODUCT DATA

Description :

A14 is a flexible polyether based open cell polyurethane foam and has reliable acoustic properties across a broad frequency range and presents a good basic solution for all reflected and reverberant noise, which is also suitable as a load bearing foam for automotive seating and interior trim applications.

Foam Classification :

To BS3379

Foam Type B:	Conventional Slabstock
Nominal Classification:	A
Colour:	Dark Grey
Density:	25-28 Kg/m^3

Sample

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SPECIFICATION

Flammability Characteristics :

Underwrites Laboratories UL94 HF1 Classification

Typical Physical Properties :

PROPERTIES	TEST METHOD	UNITS OF MEASURE	TYPICAL VALUE	TOLERANCE RANGE
DENSITY		KG/M^3		25-28
HARDNESS		NEWTONS		120-160
TENSILE STRENGTH			70KpA	
ELONGATION AT BREAK		% MIN	150	
COMPRESSION SET		% MIN	102	
FLAMMABILITY	FMVSS302		PASS	
THERMAL CONDUCTIVITY		$W.M^{-2}.K^{-1}$	0.045	

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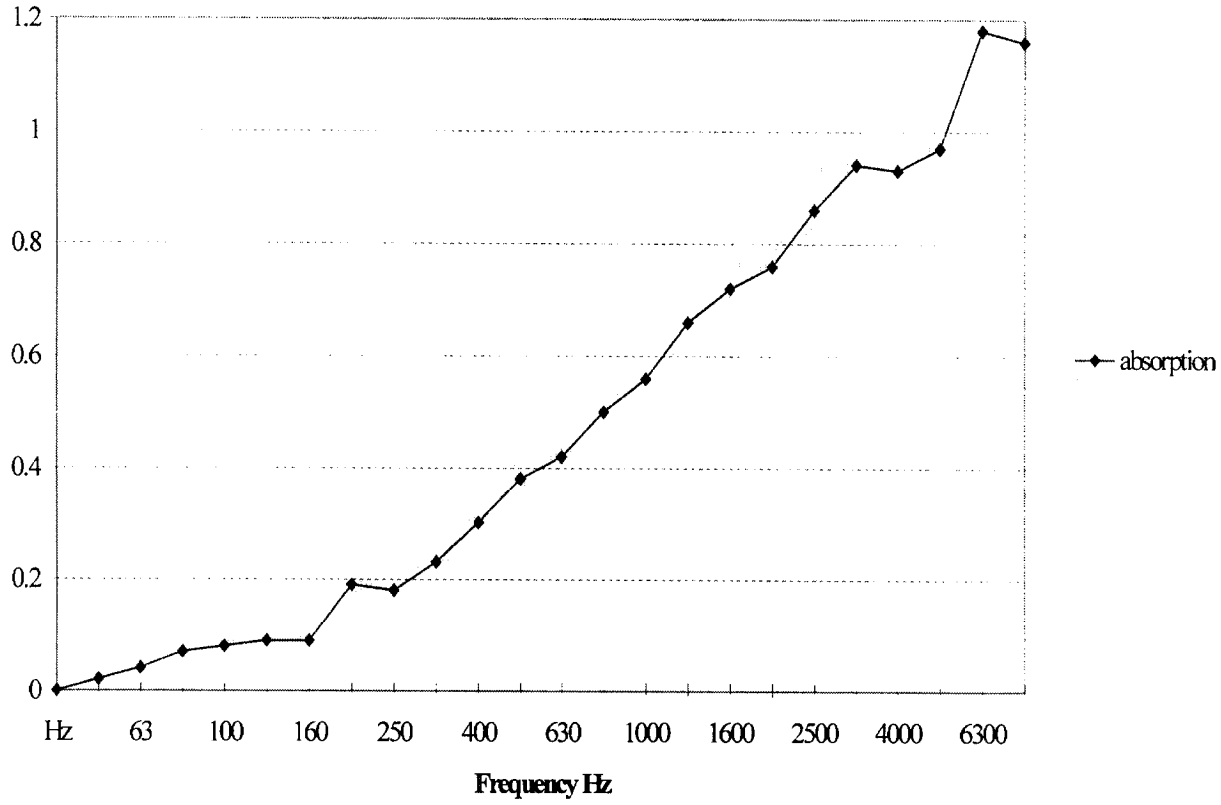
ABSORPTION COEFFICIENT

Random Incidence Sound Absorption



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TYPICAL USES :

Sound absorption for areas requiring good absorption but requiring better stability than loosely bound fibrous material.

Typical Areas: Panels around rotating machinery, engine rooms and close fit canopies.

SCOPE OF SUPPLY :

In cut parts to customer drawings or in sheet form

Thickness: 5mm to 100mm in increments of 5mm

Width (mm)	Length (mm)
1000	1250
1250	1250
1000	1500
1250	1500
1000	1880
1250	1880
1250	2500

Other sheet sizes are available on request.

APPLICATION METHODS :

Can be laminated to most other products in the T Mat range, in particular self adhesive for rapid fit. Direct application to most substrates including galvanised or zintec coated steel, glass fibre or timber.

Good clean substrate is essential. Remove all greases, oils and dust.

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MATERIAL CODE : P19

PRODUCT DATA

Description:

High performance transfer tape

Type of Adhesive: Modified Acrylic

PROPERTIES	TEST METHOD	UNIT	OPEN/CLOSED	TOLERANCES
20 Min Adhesion	TM-01	N/m	1000	
24 Hr Adhesion	TM-01	N/m	1000	
1kg Static Shear	TM-02	Hrs	25 (Per 25mm²)	
Release	TM-3.1	N/m	15	
Temperature Range		°C		-20 to +130

Scope of Supply:

In roll form

Material is generally bonded to end user product.

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Tape Construction:

	TYPE	THICKNESS (MICRONS)	WEIGHT (GSM)
Release Liner	Glassine	65	76
Carrier			
Adhesive	Modified acrylic	50	50
Total Tape		115	

Application:

Laminated to foam or rubber where dimensional stability is not required.

* High adhesion to foam and rubber
* Aggressive tack and good shear
* Does not inhibit foam elasticity
* Elevated temperature performance

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MATERIAL CODE : P15

PRODUCT DATA

Description :

Double sided filmic tape with differential adhesives

Adhesive Type:

Typical Specification:

PROPERTIES	TEST METHOD	UNITS OF MEASURE	VALUE OPEN/CLOSED	TOLERANCE RANGE
20 MIN ADHESION	DST - 1	N/m	400 800	
24 HRS ADHESION	DST - 1	N/m	450 900	
1KG STATIC SHEAR	DST - 2	Hrs	100 5	
RELEASE	DST - 3	N/m		
TEMPERATURE RANGE		°C		-20 to +130
UV LIGHT RESISTANCE			Limited Limited	
PLASTICIZER RESISTANCE			Good Limited	

Scope of Supply:

In roll form 1m wide x 100m long

Generally applied to factory finished products

Application:

Laminating to plasticized substrates.

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MATERIAL CODE : U18

PROVISIONAL PRODUCT DATA

PRODUCT REFERENCE:	Needled Felt. For use as Acoustic Absorption or Thermal Insulation in Die cut or Moulded Form.
PRODUCT WEIGHT:	Various.
PRODUCT LOFT:	Various.
FIBRE TYPE:	100% Polyester.
BINDER TYPE:	Mechanical and Thermal
ROLL WIDTH:	2000m.
ROLL LENGTH:	20m.
APPEARANCE:	White or Grey.

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SPECIFIC PRODUCT DATA SHEET

PROPERTIES	TEST METHOD	UNITS OF MEASURE	TYPICAL VALUE	TOLERANCE RANGE
PRODUCT WEIGHT		Kg/M^3	30	
THICKNESS / LOFT		mm	50	
OPERATING TEMPERATURE		°C	130	
FACE TEMPERATURE				
MELT TEMPERATURE		°C	240	
THERMAL CONDUCTIVITY		W/MK	0.041	
FIRE RATING	FMVSS 302			PASS

Fibre Type: **100% Polyester**

Binder Type: **Mechanical and thermal**

Sheet Width: **1.0 mtr Max**

Sheet Length: **2.0 mtr Max**

Toxicity: **No known physical or health hazard associated with these products.**

Special Properties: **When tested in suitable composite this product will conform to the BS6526 requirements for thermal insulation.**

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MATERIAL CODE : D05

PRODUCT DATA

Description :

D05 is a mineral loaded PVC sound barrier mat. Damping causes sound energy to be converted to heat, which is dissipated to air. Barrier application reduces structural vibration and airborne sound transmission via mass.

Polymer Type:

Poly Vinyl Cloride (PVC)

Colour:	Black
Classification:	Barrier Material
Flammability:	FMVSS 302

Sample

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SPECIFICATION

Typical Physical Properties :

PROPERTIES	TEST METHOD	UNITS OF MEASURE	TYPICAL VALUE	TOLERANCE RANGE
HARDNESS		SHORE A	90	
SPECIFIC GRAVITY (TYPICALLY)		G/CM^3		2.5-2.8
SUPERFICIAL WEIGHT		KG/M^2	2.5	
TENSILE STRENGTH		Mpa	2.6	
ELONGATION AT BREAK		%	90	
FLAMMABILITY	FMVSS 302			
OPERATING TEMPERATURE		°C	30-65	

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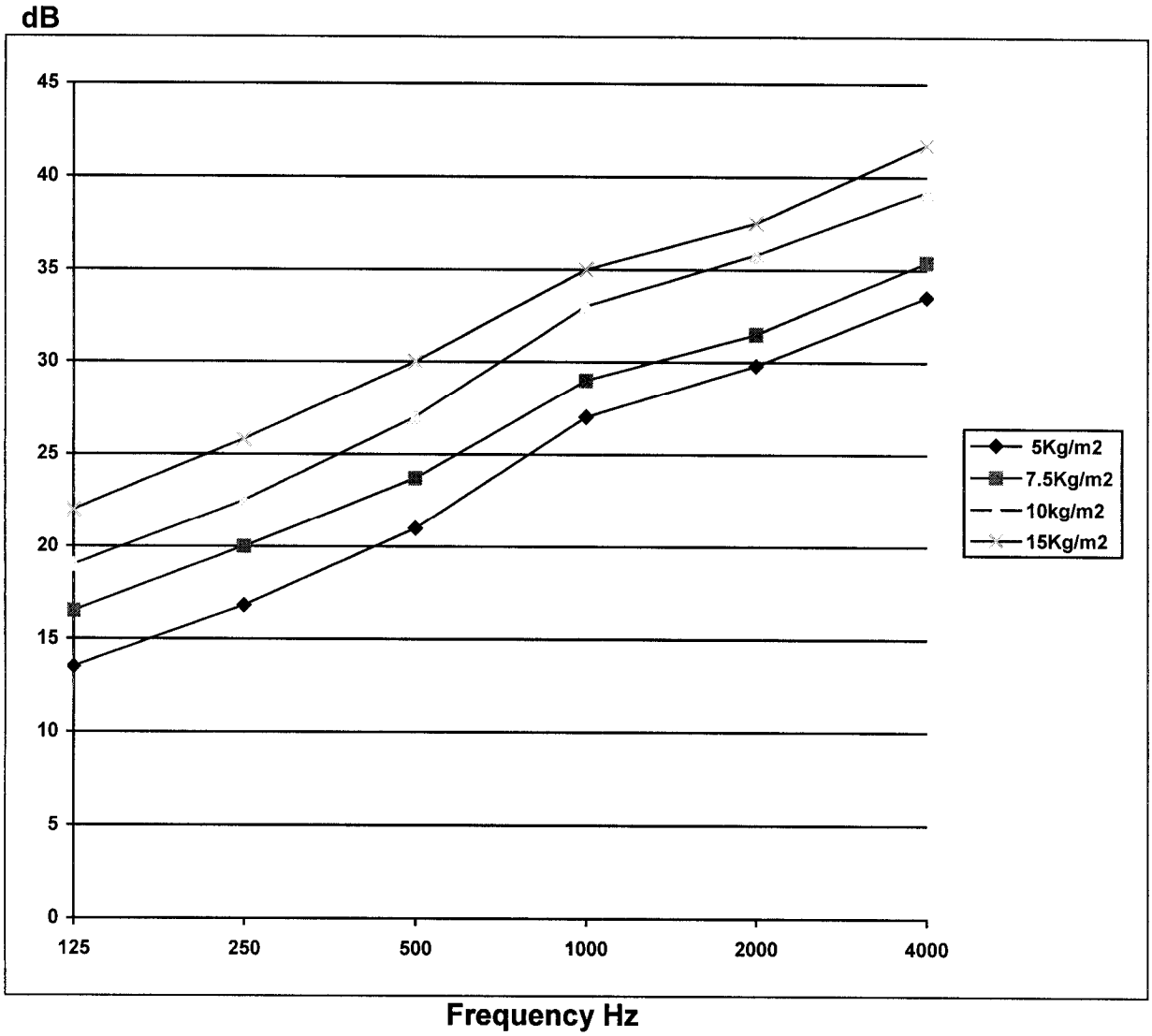
TRANSMISSION LOSS VALUES

NOISE REDUCTION INDICES



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TYPICAL USES :

Damping of vibrating panels/structures - Provides mass barrier between noise source and receiver, particularly at low frequency and can be laminated to other products to improve high frequency reduction.

SCOPE OF SUPPLY :

In cut parts to customer requirements/drawings or in sheet form.

Thickness: 1mm, 1.5mm, 2mm, 3mm, 4mm and 5mm

Can be supplied in roll form - Dimensions on request

Width (mm)	Length (mm)
1000	1250

APPLICATION METHODS :

Can be laminated to most T Mat products - Normal fixing method is by pressure sensitive self adhesive tape, factory applied if required prior to despatch..

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