



3002-2

Thinsulate™ Acoustic Insulation AU3002-2

Data Sheet

General Description

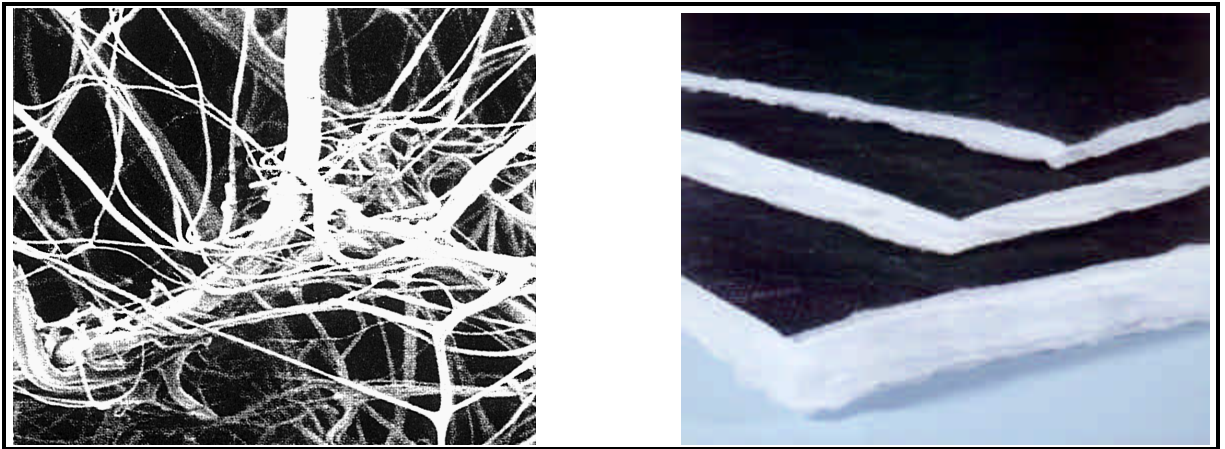
This non-woven mat has excellent sound absorbing properties useful in many automotive interior applications, for example inside door panels, instrument panels, pillar stuffers, and package trays. It is compressible, non-linting, lightweight, and can be easily die-cut. A black polyolefin scrim on one side protects the fibres. The product has been calendered to improve the attachment of the scrim and abrasion resistance of the fibrous surface.

General Construction

The web is composed of 30% polyester staple fibres, and 70% polypropylene fibres. The polypropylene fibres are extremely fine, producing the high energy absorption characteristic with the low weight. The polyester fibres are added to strengthen the web. The black scrim attached to one side is a 100% polypropylene non-woven fabric.

Magnified image of Thinsulate™ acoustic insulation showing fine PP and larger PE fibres.

Thinsulate™ acoustic insulation material (note: black scrim supplied with selected AU products only).



Special Characteristics

Suitable for application in vehicle cabin and luggage compartment interiors, especially vertical surfaces. As the material compresses easily, it is not recommended for applications under the carpet (or other flooring) but its light weight makes it ideal for other horizontal applications like combining with headliners for example.

Attaching to trim panels is recommended, preferably using ultrasonic or heat spot welding, but adhesives (transfer tapes or hot melt) may also be used. Not recommended for applications where temperatures will be above 90°C.

As the fibres are hydrophobic, this material will not absorb water. Therefore the risk of mildew and odours developing are minimal allowing this product to be used in humid or moist conditions.

3002-2

General Properties

Composition:	70% polypropylene, 30% polyester (Web) 100% polypropylene (Scrim)
Colour	White web with black scrim.

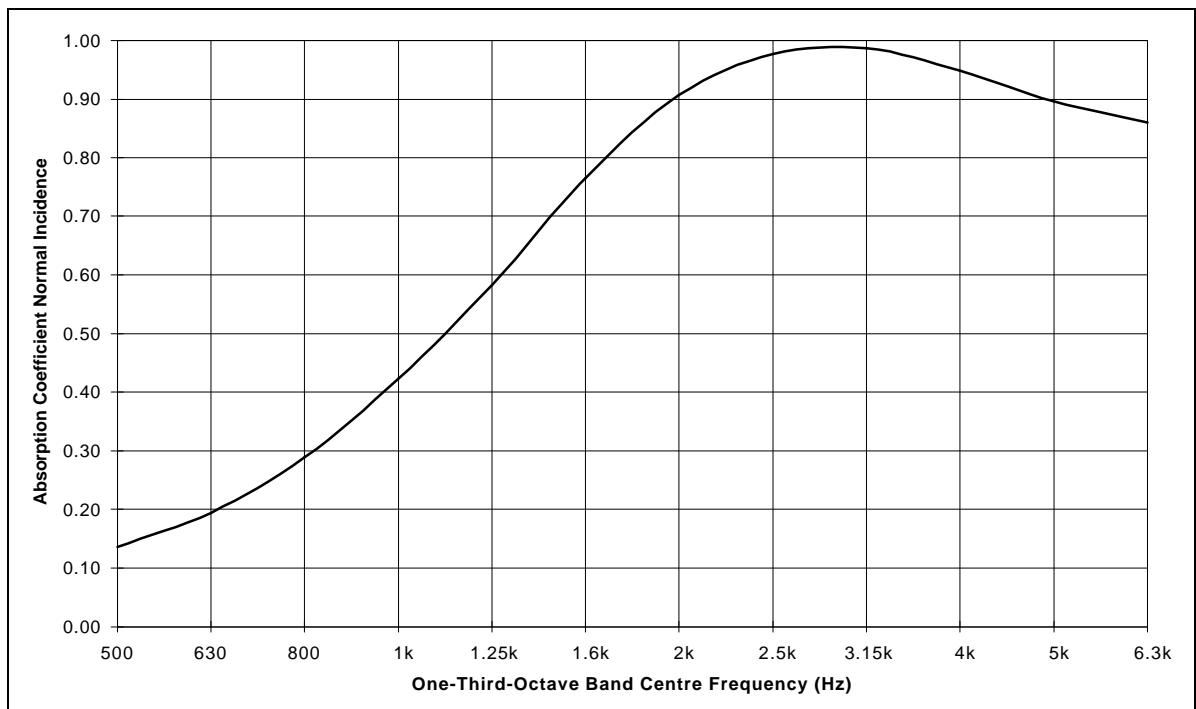
Physical Properties (Typical values)

Thickness:	19mm (Tested to 3M procedure OTM20005)
Surface Weight:	345g/m ² (tested to 3M procedure OTM 1151)
Density:	18.2 kg/m ³
Flammability:	Meets FMVSS 302 (DIN75 200, ISO 3795 (1976))

Acoustical Properties

Sound Absorption Properties measured according to ASTM E1050

Dual Microphone Impedance Tube Method that measures Normal Incidence Sound.
Tested with the scrim facing away from the microphones.



Additional Information

This data sheet contains typical information specific to the product. This information should not be used to determine a product specification.

Further information on the use of the product and samples are available separately.

Important notice to purchaser

All statements, technical information, and recommendations herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. Please ensure before using our product that it is suitable for your intended use. All questions of liability relating to this product are governed by the Terms of Sale subject, where applicable, to the prevailing law.



3M Insulation Products
c/o 3M Deutschland GmbH
Carl Schurz Strasse 1,
D-41453 Neuss, Germany
Tel (49)-2131 142277
Fax (49)-2131 143692

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AU 3020-6

Thinsulate™ Acoustic Insulation AU3020-6

Technical Data Sheet

General Description

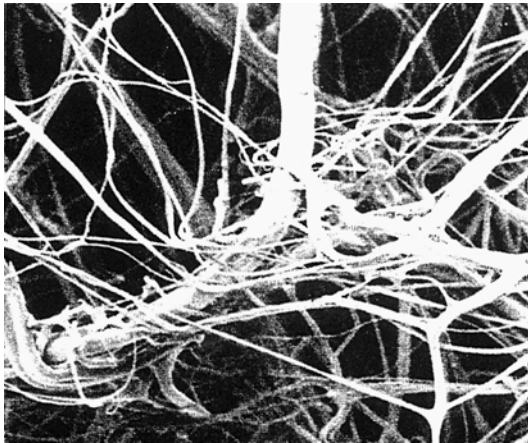
This non-woven mat has excellent sound absorbing properties useful in many automotive interior applications, for example inside door panels, instrument panels, pillar stuffers, and package trays. It is compressible, non-linting, lightweight, and can be easily die-cut. A polyolefin scrim on one side protects the fibres. The product has been calendered to improve the attachment of the scrim.

General Construction

The web is composed of 33% polyester staple fibres, and 67% polypropylene fibres. The polypropylene fibres are extremely fine, producing the high-energy absorption characteristic with the low weight. The polyester fibres are added to strengthen the web. The white scrim attached to one side is a 100% polypropylene non-woven fabric.

Magnified image of Thinsulate™ Acoustic Insulation showing fine PP and larger PE fibres.

Thinsulate™ Acoustic Insulation material



Special Characteristics

Suitable for application in vehicle cabin and luggage compartment interiors, especially vertical surfaces. As the material compresses easily, it is not recommended for applications under the carpet (or other flooring) but its lightweight makes it ideal for other horizontal applications like combining with headliners for example.

Attaching to trim panels is recommended, preferably using ultrasonic or heat spot welding, but adhesives (transfer tapes or hot melt) may also be used. Not recommended for applications where temperatures will be above 120°C.

As the fibres are hydrophobic, this material will not absorb water. Therefore the risk of mildew and odours developing are minimal allowing this product to be used in humid or moist conditions.

3020-6

General Properties

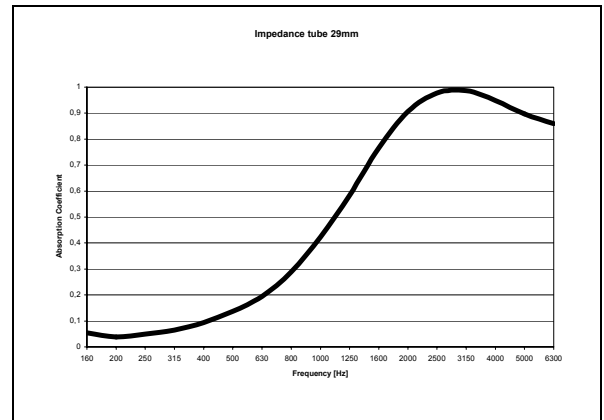
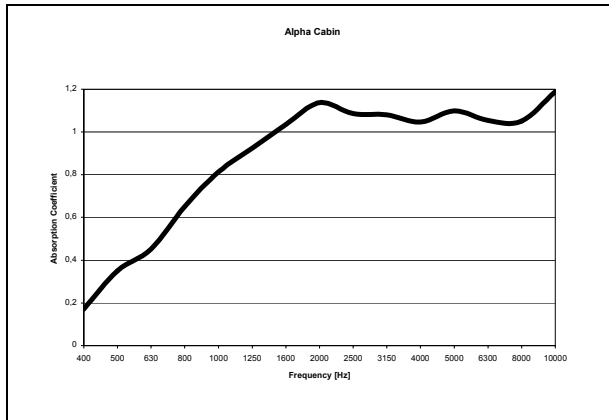
Composition: 67% polypropylene, 33% polyester (Web)
100% polypropylene (Scrim)
Colour: White web with white scrim.

Physical Properties (Typical values)

Thickness: 19mm (SAE J1355 @ 0,002 psi, 14 N/m²)
Surface Weight: 317g/m²
Density: 16.7 kg/m³
Flammability: 0mm/min as per FMVSS 302 (DIN75200, ISO 3795 (1976))
Temperature Stability: 120° Celsius for 2000 Hours

Acoustical Properties

1. Alpha Cabin Measurement with 1,2m² sample measuring Random Incidence Sound. Tested with scrim facing away from the microphones.
2. Dual Microphone Impedance Tube Method that measures Normal Incidence Sound. Tested with the scrim facing away from the microphones. (ASTM E1050)



Additional Information

This data sheet contains typical information specific to the product. This information should not be used to determine a product specification. Samples and further information on the use of the product are available separately.

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3M Deutschland GmbH
Automotive Laboratory
Carl-Schurz-Strasse 1
D-41453 Neuss
Tel. (49)-2131-142890
Fax. (49)-2131-143849

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MA 4700 Series* High Performance Acoustic Insulation

Technical Data

May, 2002

ISO 9001/QS 9000 Certified

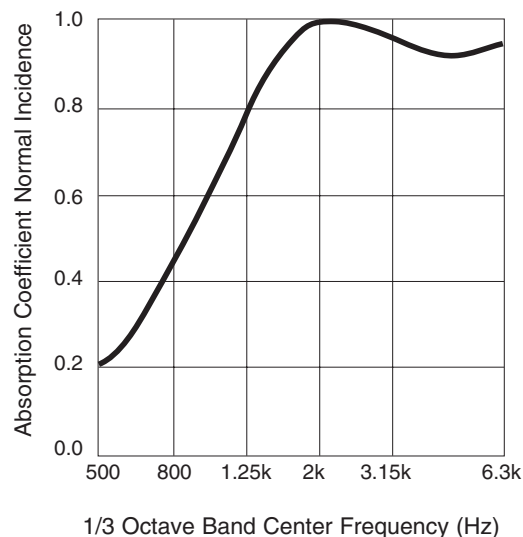
Product Description

3M High Performance Insulation is specifically designed for a wide variety of marine interior applications including overheads, bulkboards, shipboard hulls, area separation panels and more for excellent sound absorbing properties.

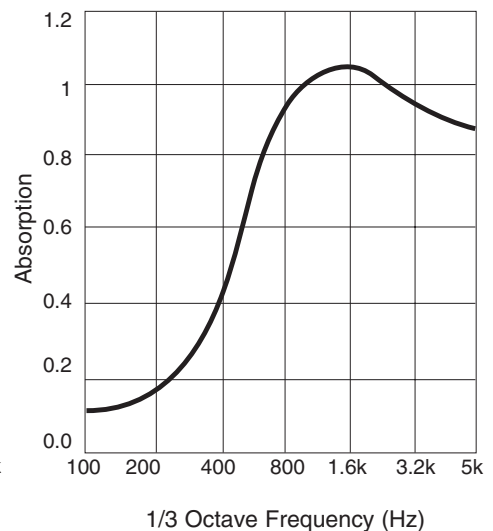
It is supplied with a white or black cover and is compressible, lightweight, conformable, and can easily be die-cut, heat sealed, and thermally or sonically bonded to many other substrates.

Acoustic Properties

ASTM E-1050



ASTM C-423: NRC = 0.72 (200-2500 Hz)



Physical Properties (nominal values)

Weight: 440 g/m² (1.4 oz/ft²) (13 oz/yd²)
 Density: 17 kg/m³ (1.0 lb/ft³) (28 lb/yd³)
 Thickness: 26 mm (1.0 inch)

Air Flow—ASTM C-522

Resistance: 900 Rayls MKS
 Resistivity: 34,000 Rayls MKS/meter

Thermal Properties

R value 3.8 at 26 mm thickness

Flammability Results

Test Method	Classification
FMVSS 302	Pass
UL 94 sec. 7	94HB
UL 94 sec. 12	94HBF and 94HF-2

* Testing completed without scrim - specific data on MA4710 and 4720 is available on request.

IMPORTANT NOTICE TO PURCHASER

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Acoustic Solutions

3M Center Building 235-2E-85
 St. Paul, MN 55144-1000
 (Toll free) 1-866-887-8438



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MA 6700 Series* High Performance Acoustic Insulation

Technical Data

May, 2002

ISO 9001/QS 9000 Certified

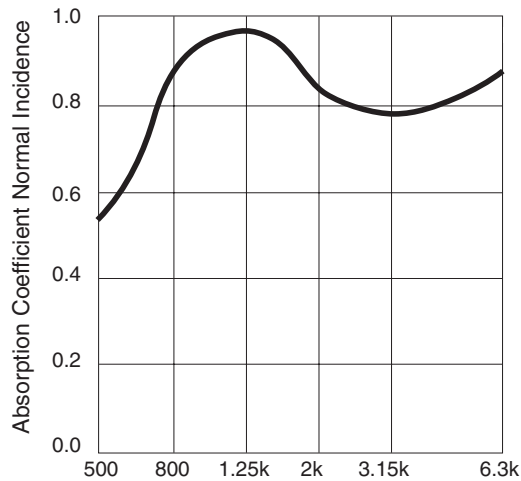
Product Description

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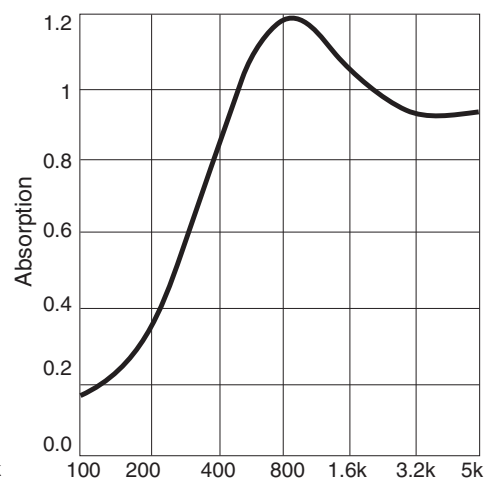
It is supplied with a white or black cover and is compressible, lightweight, conformable, and can easily be die-cut, heat sealed, and thermally or sonically bonded to many other substrates.

Acoustic Properties

ASTM E-1050



ASTM C-423: NRC = 0.91 (200-2500 Hz)



1/3 Octave Band Center Frequency (Hz)

1/3 Octave Frequency (Hz)

Physical Properties (nominal values)

Weight: 640 g/m² (2.1 oz/ft²) (19 oz/yd²)
 Density: 14 kg/m³ (0.9 lb/ft³) (24 lb/yd³)
 Thickness: 44 mm (1.7 inch)

Air Flow – ASTM C-522

Resistance: 1000 Rayls MKS
 Resistivity: 23,000 Rayls MKS/meter

Thermal Properties

R value 5.8 at 44 mm thickness

Flammability Results

Test Method	Classification
FMVSS 302	Pass
UL 94 sec. 7	94HB
UL 94 sec. 12	94HBF and 94HF-2

* Testing completed without scrim - specific data on MA 6710 and 6720 is available on request.

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