

## Mtech – Melamine Acoustic Foam

Mtech is a perfect acoustic solution for the construction industry due to its high sound absorption, fire resistance and thermal properties. Mtech is an open-pore sound absorber (light grey or white) which ensures pleasant room acoustics, even when retrofitted. Mtech can be used in its 'raw' state or covered using a variety of facings, it can even be directly printed onto. These lightweight absorbers allow large-scale, free-floating elements to be implemented into your projects, offering an attractive room design.

### Mtech Unique Properties

Due to the melamine content, Mtech has a number of unique properties.

- Class "0" flame resistance without the addition of flame retardants
- Application temperature up to 240°
- Constant physical properties over a wide temperature range
- Class A sound absorption
- 9kg m<sup>3</sup> - Lightweight
- Good thermal insulation properties

Never before has an acoustic material afforded users such versatility and creativity.

### Excellent Customer Service - Delivered From Our UK Manufacturing Plant.

Tech Material's 40,000 sq ft state of the art factory provides Architects and Interior Designers with customer support not seen before.

All Architects and Interior Designers benefit from:

- Free CAD design support with each order
- Free prototype samples made to your design
- Free sample pack
- Free acoustic design white papers
- Free Design Club membership including:
  - Free technical updates on all products
  - Free regular design forums held at our factory, see new designs and test your own
  - Yearly acoustic teach points offered to your staff and graduates.

**To find out more call 00 44 (0)1952 947390**

### Standard Panel Size

- 1250mm x 1250mm x 50mm
- 1200mm x 1200mm x 50mm
- 1200mm x 600mm x 50mm
- 600mm x 600mm x 50mm

Custom sizes available.



## Mtech – Data Sheet

<b>Product Name</b>	Mtech
<b>Composition</b>	Melamine Foam
<b>Colour</b>	Light Grey
<b>Block Size</b>	2500mm x 1250mm x 500mm
<b>Cutting Tolerances</b>	+/- 3mm
<b>Thickness</b>	<450mm
<b>Density</b>	9kg m <sup>3</sup> [±10%]
<b>Tensile Strength</b>	EN ISO 1798 kPa > 130
<b>Hardness</b>	40% deformation: 7 - 20kpa
<b>Compression Set</b>	50% at 70c for 22 hours
<b>Thermal Conductivity</b>	0.035W/mK@10c
<b>Toxicity</b>	DIN 4102 Class A"
<b>Fire Resistance</b>	BS 476 Part 6 & 7 Class "0"
<b>Acoustic Performance</b>	Class A @ 50mm thick
<b>Chemical Resistance</b>	Resistant to hydrolysis, alcohols, hydrocarbons, moisture, organic solvents and dilute acids

## Mtech - Acoustic Performance

The test results from the acoustic experiments in an impedance tube according to ISO 10534-2 and in a reverberation room according to DIN EN ISO 354 are shown in Diagrams 1 and 2. In the medium and high frequency ranges, Mtech exhibits an outstanding sound absorption behaviour.

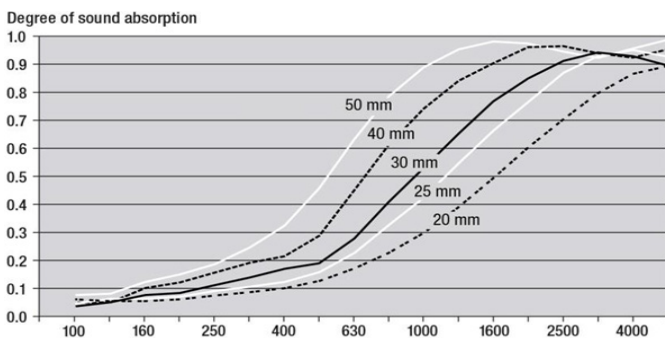


Diagram 1: Degree of sound absorption of Mtech as a function of the thickness, according to ISO 10534-2 (impedance tube).

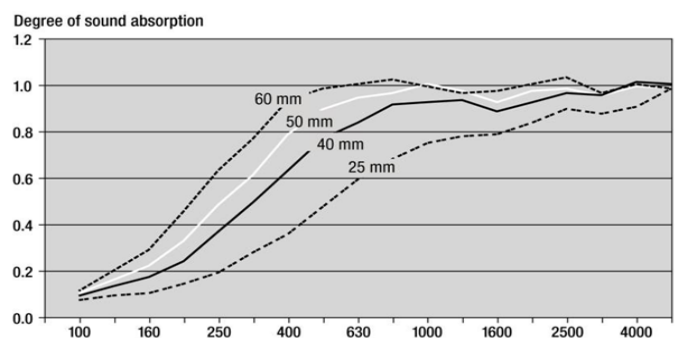


Diagram 2: Degree of sound absorption of Mtech as a function of the thickness, according to DIN EN ISO 354.

## Safety and Environmental Data

Mtech is produced without the use of halogenated hydrocarbons. The product is not hazardous to water. Mtech is free from blowing agents and is not subject to labelling requirements under the German Hazardous Material Regulations.

Waste from Mtech can be recycled for purposes of heat and material recovery. Flake composite foams made of the same material and having densities ranging from 25 to 100 kg/m<sup>3</sup> exhibit outstanding sound absorption in the lower and medium frequency ranges. Loose flake filling has already been successfully installed in hollow spaces of suspended ceilings with the objective of improving their acoustic properties.