

Preliminary Technical Information

Basotect® Dark EcoBalanced

® = registered trademark of BASF SE

Product description

Basotect® Dark EcoBalanced is a dark-grey, open-cell foam made of melamine resin.

Delivery and storage

Basotect® is manufactured in the form of untrimmed blocks with a thin outer skin. The standard dimensions of the blocks are 2500 x 1250 x 500 mm. Special lengths can be produced upon request.

The blocks are delivered in film packaging and should be stored in a dry place. Direct and prolonged exposure to ultraviolet radiation should be avoided.

Prior to being processed, the blocks should be unwrapped and stored for a minimum of three days, preferably five days, in a standard conditioned atmosphere. The reason for this is the sorption behavior of the melamine resin. The dimensions of the blocks change as they absorb or release moisture.

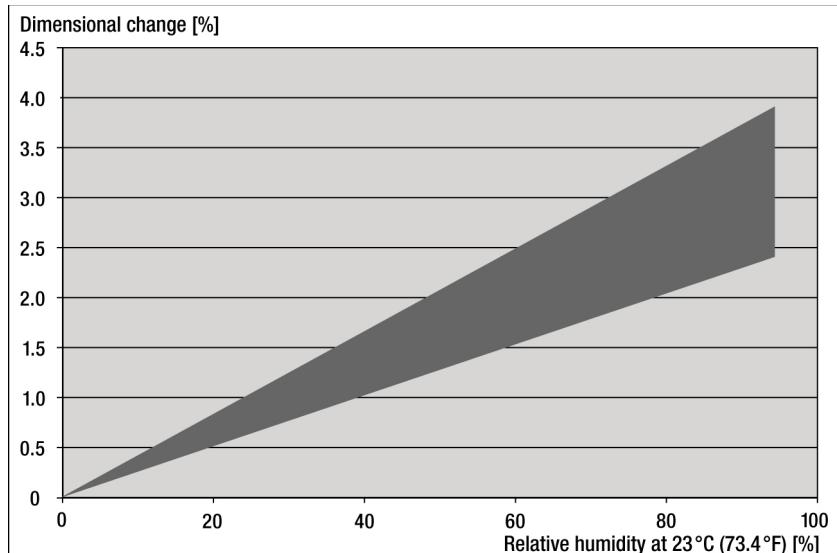


Diagram 1: Dimensional change as a function of the relative indoor humidity at an ambient temperature of 23°C [73.4°F]

Properties

Physical properties

The thermoset character and the open-cell structure of the melamine resin foam translate into an attractive property profile:

- High sound absorption
- Low thermal conductivity
- High fire resistance
- Low density
- High long-term use temperatures
- No brittleness at low temperatures

Properties	Standards	Units	Values
Density	EN ISO 845	kg/m ³	8.5 +/-1.5
Compressive strength	EN ISO 3386-1	kPa	>5
Average value			
Tensile strength	EN ISO 1798	kPa	>100
Average value			
Elongation at break	EN ISO 1798	%	>18
Average value			
Thermal conductivity	DIN EN 12667	W/(m*K)	≤ 0.04
Fire behavior			
Germany	DIN 4102-1		B1
Europe	EN 13501		B/C*
USA	UL 94		V - 0 HF-1

* test results indicating the classification are available; the full certification is scheduled

Table 1: Physical properties of Basotect® Dark EcoBalanced

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 2 and 3. In the medium and high frequency ranges, Basotect® Dark EcoBalanced exhibits an outstanding sound absorption behavior. At low frequencies, technical acoustic improvements can be achieved, for example, by means of additional heavy layers.

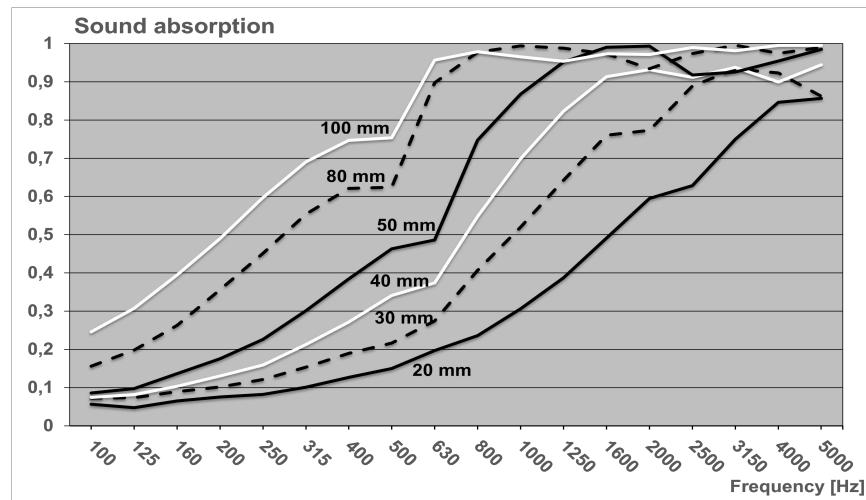


Diagram 2: Degree of sound absorption of Basotect® Dark EcoBalanced as a function of the thickness, according to ISO 10534-2 (impedance tube).

Chemical resistance

According to DIN 53428, Basotect® Dark EcoBalanced, as a thermoset material, is resistant to many media (Table 2). The compressive strength according to ISO 3386-1 (40% compression, 4th load cycle) and the change in sample geometry serve as evaluation criteria. The figures apply to a test temperature of 23°C [73.4°F].

Medium	Evaluation
Acids	
Acetic acid 100 %	+
Lactic acid 10 %	+
Nitric acid 10 %	-
Hydrochloric acid 10 %	-
Sulfuric acid 10 %	-
Citric acid 10 %	+
Other chemicals	
Dishwashing detergent 0.1%	+
Olive oil	+
Sodium chloride solution 3.6%	+
Universal cleaner 0.1%	+
Hydrocarbons	
Gasoline	+
Diesel	+
Kerosene	+
Lyes	
Ammonia water 25 %	+
Sodium carbonate 25 %	+
sodium hydroxide solution 40 %	+
Esters	
Butylacetat	-
Ketones	
Acetone	+
Other solvents	
Glycol ether	+
Alcohols	
Ethyl alcohol	+
Methyl alcohol	+

Table 2: Chemical resistance of Basotect® Dark EcoBalanced

**Product safety
and environmental**

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

Waste from Basotect® 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/m³ 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. Flakes made of Basotect® have also already been used as a binder for liquids.

**Additional technical
information**

Detailed technical information can be obtained from:

BASF SE
GBM Specialty Polymers
www.basotect.de
basotect@basf.com

Safety

The information and instructions provided in the **Safety Data Sheet** have to be adhered to when this product is handled. For the rest, all preventive and occupational-safety **protection measures** that apply to the handling of chemicals **must be observed**.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. (October 2025)