

PRODUCT DATA SHEET

SikaBlock[®] M450 N

POLYURETHANE DESIGN BOARD

APPLICATIONS

- Manufacture of substructure for design, styling and clay models
- Manufacture of styling models and design studies
- Manufacture of substructure for cubing and data control models
- Short serie mold-making for composites parts by hand lay-up or vacuum infusion

MAIN PROPERTIES

- Easily workable by hand or CNC forming shavings and very low dust
- Very good surface smoothness
- Good strength and edge stability for its light density
- Easy to seal and paint

DESCRIPTION

Basis	Polyurethane, orange
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PHYSICAL PROPERTIES

(approx. values)

Density	ISO 845	g/cm ³	0.43
Shore hardness	ISO 868	D	45
Flexural strength	ISO 178	MPa	12
E-Modulus	ISO 178	MPa	450
Compressive strength	ISO 844	MPa	11
Working temperature		°C	-30 / +70
Linear thermal expansion coefficient (CTE) α_T	DIN 53 752	K ⁻¹	55 – 60 x 10 ⁻⁶

PROCESSING DATA

- The material and processing temperature shall be between 18 °C and 25 °C.
- If the boards need to be bonded, make sure that the surfaces are clean, dry and free of grease or oil.
- For bonding SikaBlock® M450 N boards together use SikaBiresin® B200 or SikaBiresin® B260.
- For further information regarding the adhesive and bonding process consult the corresponding Product Data Sheet.
- SikaBlock® M450 N can be easily machined by milling, drilling, sawing or modified manually. It is recommended to use high performance tools to machine these boards.
- For milling parameters check information from cutting tool manufacturers or get the General Guideline "Milling parameters for SikaBlock®" for more general information.

PACKAGING UNITS

■ Board:	SikaBlock® M450 N	1500 mm x 500 mm x 50 mm, 36 pieces / pallet
		1500 mm x 500 mm x 75 mm, 24 pieces / pallet
		1500 mm x 500 mm x 100 mm, 18 pieces / pallet
		1500 mm x 500 mm x 150 mm, 12 pieces / pallet
		1500 mm x 500 mm x 200 mm, 8 pieces / pallet

Larger format in 2000 x 1000 mm is possible upon demand

STORAGE CONDITIONS

- The board needs to be stored flat over the entire surface in dry conditions.
- Many models and tools are made of bonded boards, either with identical or other materials. Storage at low and elevated temperature can lead to high stresses due to the different expansion coefficients. To prevent this, it is necessary to store the models and tools at a temperature range between 15 °C and 30 °C.

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Advanced Resins. Copies of the following publications are available on request: Safety Data Sheets

BASIS OF PRODUCT DATA

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

HEALTH AND SAFETY INFORMATION

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

LEGAL NOTICE

The information, and, in particular, the recommendations relating to the application and enduse of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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