BUILDING TRUST

PRODUCT DATA SHEET

SikaBlock® M450 N

Polyurethane design board

TYPICAL PRODUCT DATA

Chemical base	Polyurethane
Color	Orange
Density	0.43 kg/l
Shore D hardness (CQP023-1 / ISO 868)	45
Compressive strength (ISO 844)	11 MPa
Flexural strength (CQP027-2 / ISO 178)	12 MPa
Flexural modulus (CQP027-2 / ISO 178)	450 MPa
Linear coefficient of thermal expansion (CQP053-1 / ISO 11359)	55 – 60 x 10^{-6} 1/K
Service temperature	-30 – 70 °C

CQP = Corporate Quality Procedure

DESCRIPTION

SikaBlock® M450 N is a polyurethane design board for manufacture of substructure for design, styling and clay models as well as for cubing and data control models.

PRODUCT BENEFITS

- 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
- Flame retardant properties

AREAS OF APPLICATION

SikaBlock® M450 N is perfectly suited for manufacture of substructure for design, styling and clay models.

It is also recommended for manufacture of styling models and design studies. The product is also designed for manufacture of substructure for cubing and data control models as well as for short serie mold-making for composites parts by hand lay-up or vacuum infusion.

This product is suitable for experienced professional users only. Tests under actual processing conditions and with additional materials such as coatings and release agents must be performed to proof material compatibility.

APPROVAL / CERTIFICATES

- Fire behavior classification: DIN 4102-B2

METHOD OF APPLICATION

Product preparation

Before SikaBlock® M450 N boards can be processed (machined) they must be conditioned to 18 °C – 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. Further details on the adhesives can be found in the respective Product Data Sheet.

Application

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.

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 Industry.
Copies of the following publications are available on request:

- Voluntary Safety Information Sheet
- General Guideline
  Milling parameters for SikaBlock®

PACKAGING INFORMATION

Dimensions [mm]	Pcs./pallet
1500 x 500 x 50	36
1500 x 500 x 75	24
1500 x 500 x 100	18
1500 x 500 x 150	12
1500 x 500 x 200	8

Larger format in 2000 x 1000 mm is possible upon demand

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

This product contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A Safety Data Sheet is therefore not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the Voluntary Safety Information Sheet.

DISCLAIMER

The information, and, in particular, the recommendations relating to the application and end-use 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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