BUILDING TRUST

PRODUCT DATA SHEET

SikaBlock® M450

DESIGN BOARD WITH DENSITY 0.45

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
- Simple laminating moulds

MAIN PROPERTIES

- Easily workable by hand or CNC forming shavings and very low dust
- Good strength and edge stability for its light density
- Good heat resistance and dimensional stability

DESCRIPTION

Basis	Hard polyurethane foam, orange
Adhesive	Labelite Glue, 1K-PUR-System
Adhesive	Biresin® Kleber Orange, 2K-PUR-System
Putty	Biresin® Spachtel Orange, 2K-Polyester-System

PHYSICAL PROPERTIES

approx. values

Components			SikaBlock® M450
Density	ISO 845	g/cm ³	0.45
Shore hardness	ISO 868	Shore D	45
Flexural strength	ISO 178	MPa	12
E-Modulus	ISO 178	MPa	430
Compressive strength	ISO 844	MPa	10
Temperature use		°C	-30 / +80
Linear thermal expansion coefficient $\alpha_{\scriptscriptstyle T}$	DIN 53 752	K-1	55 x 10 ⁻⁶



PROCESSING DATA

Adhesive/Filler		Labelite Glue	Biresin® Kleber Orange / G53	Biresin® Spachtel Orange / BPO	
Mixing ratio	by weight	1-component PU	100 : 65	100 : 2	
Pot life	min	<60	20	5	
Setting time	h	2	6	20 min	

- The material must be acclimatized to 18 25 °C prior to machining.
- Bonding areas must be clean, dry and free of dust or grease or oil (cleaning with Sika Reinigungsmittel 5).
- To bond boards together we recommend Labelite Glue or Biresin® Kleber Orange (more information see PDS).
- Machining of the block is easily accomplished by sawing, milling and so on with high performance tools or by hand.
- For more information about milling please ask for advice from cutting tool manufacturer or refer to our separate leaflet for milling parameters.
- For correction and repair we recommend Biresin® Spachtel Orange (more information see PDS).

PACKAGING UNITS

■ Board:	SikaBlock® M450	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, 10 pieces / pallet
Adhesive:	Labelite Glue	6 x 1 kg
Adhesive:	Biresin® Kleber Orange, (A)	1.5 kg
	Biresin® G53, (B)	0.975 kg
Filler: Biresin® Space	Biresin® Spachtel Orange, (A)	6 x 1.26 kg in a box
	BPO-Paste, (B)	6 x 0.04 kg tubes

STORAGE CONDITIONS

- Product has unlimited shelf life when stored on flat base in dry conditions.
- During storage and transport of finished models and tools temperature should be between 18-25°C and variations should be kept as moderate as could be.



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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