

## PRODUCT DATA SHEET

# SikaBlock® LAB 1000

Polyurethane tooling board

## TYPICAL PRODUCT DATA

Chemical base	Polyurethane
Color	Grey
Density	1.67 kg/l
Shore D hardness (CQP023-1 / ISO 868)	88
Compressive strength (CQP028-5 / ISO 604)	115 MPa
Flexural strength (CQP027-2 / ISO 178)	90 MPa
Flexural modulus (CQP027-2 / ISO 178)	7300 MPa
Heat deflection temperature (CQP030-1 / ISO 75B)	95 °C
Glass transition temperature (CQP053-1 / ISO 11359)	95 °C
Linear coefficient of thermal expansion (CQP053-1 / ISO 11359)	$45 \times 10^{-6} 1/K$

CQP = Corporate Quality Procedure

## DESCRIPTION

SikaBlock® LAB 1000 is a grey polyurethane tooling board for gauges and checking fixtures.

## PRODUCT BENEFITS

- Good milling properties
- Dense, fine surface
- Very low coefficient of thermal expansion
- Very high compressive strength and stiffness

## AREAS OF APPLICATION

SikaBlock® LAB 1000 is well suited for gauges and checking fixtures.

It is also designed for vacuum forming molds and metal sheet forming tools.

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.

METHOD OF APPLICATION

Product preparation

Before SikaBlock® LAB 1000 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 cleaning Sika® Cleaner G+M or another suitable cleaner or solvent can be used.

For bonding SikaBlock® LAB 1000 boards together use SikaBiresin® B180. Further details on the adhesives can be found in the respective Product Data Sheet.

Application

SikaBlock® LAB 1000 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
830 x 500 x 50	20
830 x 500 x 75	13
830 x 500 x 100	10

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

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