

## PRODUCT DATA SHEET

# SikaBlock® LAB 850

Polyurethane tooling board

## TYPICAL PRODUCT DATA

Chemical base	Polyurethane
Color	Dark blue
Density	1.18 kg/l
Shore D hardness (CQP023-1 / ISO 868)	79
Compressive strength (CQP028-5 / ISO 604)	47 MPa
Flexural strength (CQP027-2 / ISO 178)	57 MPa
Flexural modulus (CQP027-2 / ISO 178)	1450 MPa
Impact resistance (CQP038-2 / ISO 179)	75 kJ/m <sup>2</sup>
Heat deflection temperature (CQP030-1 / ISO 75B)	70 °C
Glass transition temperature (CQP053-1 / ISO 11359)	82 °C
Linear coefficient of thermal expansion (CQP053-1 / ISO 11359)	110 x 10 <sup>-6</sup> 1/K

CQP = Corporate Quality Procedure

## DESCRIPTION

SikaBlock® LAB 850 is a dark blue tooling board with high impact resistance for foundry patterns and core boxes.

## PRODUCT BENEFITS

- High impact resistance
- Easy machining
- Very good abrasion resistance
- Very good surface aspect after machining

## AREAS OF APPLICATION

SikaBlock® LAB 850 is designed for foundry patterns and core boxes for cold box process. It is as well suited for diverse molds and tools. This product is suitable for experienced professional users only. The boards must be tested for the specific application in each case, e.g. type of sand molding process, binder, amine catalyst, etc.

## METHOD OF APPLICATION

### Product preparation

Before SikaBlock® LAB 850 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 850 boards together use SikaBiresin® B180. Further details on the adhesives can be found in the respective Product Data Sheet.

### Application

SikaBlock® LAB 850 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
1000 x 500 x 50	36
1000 x 500 x 75	24
1000 x 500 x 100	18

## 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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## PRODUCT DATA SHEET

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