

# SikaBlock® M970

## Tooling board - high abrasion resistant

### Areas of Application

- Manufacture of core boxes, foundry models and match plates in Coldbox Processing

### Product Benefits

- Very high abrasion resistance
- Very high compressive and tensile strength as well as edge stability
- Low coefficient of thermal expansion
- Excellent milling properties
- High-grade, dense surface

### Description

- Basis Polyurethane, turquoise
- Adhesive **Biresin® Power Adhesive Thix**, two component epoxy system
- Adhesive **Biresin® Kleber grün Neu or blau**, 2C PUR system, (with accelerator **Biresin® HC586**)

### Physical Data (approx. values)

SikaBlock® M970			
Density	ISO 845	g/cm <sup>3</sup>	1.2
Shore hardness	ISO 868	-	D 84
Flexural strength	ISO 178	MPa	110
E-Modulus	ISO 604	MPa	2,550
Compressive strength	ISO 178	MPa	105
Impact resistance	ISO 179 Ue	kJ/m <sup>2</sup>	25
Abrasion resistance	ISO 4649	mm <sup>3</sup>	230
Heat distortion temperature	ISO 75 B	°C	78
Coefficient of thermal expansion (CTE), $\alpha_T$	DIN 53 752	K <sup>-1</sup>	68 x 10 <sup>-6</sup>

### Processing Data

Adhesives	Komponente A	<b>Biresin® Power Adhesive Thix</b>	<b>Biresin® Kleber grün Neu or blau</b>
	Komponente B	<b>Biresin® Power Adhesive</b>	<b>Biresin® Kleber grün Neu or blau</b>
Mixing ratio in parts by weight		100 : 33	100 : 50
Potlife	min	30	15 - 20
Setting time (for milling)	h	16	8 - 10

### Packaging

Board materials	<b>SikaBlock® M970</b>	1000 mm x 500 mm x 30 mm, 30 pieces / pallet 1000 mm x 500 mm x 50 mm, 36 pieces / pallet 1000 mm x 500 mm x 75 mm, 24 pieces / pallet 1000 mm x 500 mm x 100 mm, 18 pieces / pallet
Adhesives	<b>Biresin® Power Adhesive Thix</b> , (A) <b>Biresin® Power Adhesive</b> , (B) <b>Biresin® Kleber grün Neu or blau</b> , AB Pack <b>Biresin® HC586</b> , accelerator	6 x 0.9 kg net in a box 6 x 0.3 kg net in a box 6 x 1 kg net component A + 6 x 0.5 kg net component B in a box 0.5 kg net

## Processing

- The material must be acclimatised to 18 - 25°C prior to machining.
- Machining of the block is easily accomplished by sawing, milling and so on with high performance tools or by hand.
- Bonding areas must be clean, dry and free of dust and grease or oil (cleaning e. g. with Sika® Reinigungsmittel 5). For bondings use e. g. Biresin® Power Adhesive Thix or Biresin® Kleber grün Neu or blau (for more information see Product Data Sheet).
- For more information about milling please seek advice from cutting tool manufacturer or our separate leaflet.

## Storage

- Product has un-limited shelf life when stored flat in dry conditions.
- During storage and transport of finished tools and models temperature variations should be kept as moderate as could be.

## Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety related data.

## Disposal considerations

Product Recommendations: Must be disposed of in a special waste disposal unit in accordance with the corresponding regulations.

Packaging Recommendations: Completely emptied packagings can be given for recycling. Packaging that cannot be cleaned should be disposed of as product waste.

## Value Bases

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

## Legal Notice

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