

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 ³	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 ²	25
Abrasion resistance	ISO 4649	mm ³	230
Heat distortion temperature	ISO 75 B	°C	78
Coefficient of thermal expansion (CTE), α_t	DIN 53 752	K ⁻¹	68 x 10 ⁻⁶

Processing Data

Adhesives	Resin (A)	Biresin® Power Adhesive Thix	Biresin® Kleber grün Neu or blau
	Hardener (B)	Biresin® Power Adhesive	Biresin® Kleber grün Neu or blau
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	SikaBlock® M970	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	Biresin® Power Adhesive Thix , resin (A) Biresin® Power Adhesive , hardener (B) Biresin® Kleber grün Neu or blau , AB Pack Biresin® HC586 , accelerator	6 x 0.9 kg net in a box 6 x 0.3 kg net in a box 6 x 1 kg net resin (A) + 6 x 0.5 kg net hardener (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 safetyrelated 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

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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