



The proven standard  
in foundry boards

# SikaBlock® M945

## YOUR JOKER FOR EVERY USE

**The excellent package of processing and final properties for model maker and foundry alike makes the new M945 a desirable all-rounder with the best price/performance ratio.**

- Simple and reliable bonding (without previously grinding)
- Very good milling behaviour
- High dimensional stability (low CTE value)
- High abrasion and swelling resistance
- Best edge stability and rib stiffness
- Excellent price/performance ratio
- Tailor-made adhesive solution Biresin® Kleber grün Neu

# SikaBlock<sup>®</sup> M945

## AREAS OF APPLICATION

- manufacture of foundry models, match plates and coldbox core boxes
- manufacture of various moulds and tools (e.g for metal sheet forming)
- manufacture of master models and mouldings for high quality demands

## PRODUCT BENEFITS

- excellent milling properties
- easy bonding
- low CTE value
- high abrasion resistance
- very high compressive and flexural strength as well as edge stability
- dense surface with good slipping properties

## DESCRIPTION

- **Basis:** Polyurethane, green
- **Adhesive:** Biresin<sup>®</sup> Kleber Thix, 2K-EP-System, farblos, thixotrop
- **Adhesive:** Biresin<sup>®</sup> Kleber grün Neu, 2K-PUR-System (with accelerator Biresin<sup>®</sup> HC586)
- **Dimensions in mm:** 1000 x 500 x Thickness 30/50/75/100

### PHYSICAL DATA (APPROX. VALUES)

Density	ISO 845	kg/ltr.	1.35
Shore hardness	ISO 868	-	D 83
Flexural strength	ISO 178	MPa	100
E-Modulus	ISO 178	MPa	3,400
Compressive strength	ISO 604	MPa	95
Impact resistance	ISO 179 Ue	kJ/m <sup>2</sup>	25
Heat distortion temperature	ISO 75 B	°C	80
Coefficient of thermal expansion (CTE), $\alpha_T$	DIN 53 752	K <sup>-1</sup>	65-70 x 10 <sup>-6</sup>

### MILLING PARAMETERS

Milling steps	1.	2.	3.	4.	5.	6.	7.
Strategy	Roughing Z - constant	Rest material Z - constant	Rest material Z - constant	Rest material Z - constant	Finishing flat areas	Finishing Z - constant	Finishing rest material shapes
Milling tool	Torus cutter	Torus copying cutter	Ball nose copying cutter	Ball nose copying cutter	Torus copying cutter	Ball nose copying cutter	Airline end mill cutter
Diameter [mm]	42	20	12	6	8	8	4
Number of teeth	3	2	2	2	2	2	2
Radius [mm]	3	4	6	3	1	4	2
Cutting speed (Vc) [m/min]	500	500	600	300	400	400	200
Revolutions [1/min]	3,800	8,000	16,000	16,000	16,000	16,000	16,000
Feedrate per tooth [mm]	0.5	0.5	0.2	0.15	0.12	0.12	0.12
Feed rate (Vf) [mm/min]	5,700	8,000	6,400	4,800	3,800	3,800	3,800
Cutting depth (ap) [mm]	3	2	1	0.3	0.3	0.3	0.1
Cutting width/Line spacing (ae) [mm]	30	10	2	0.5	4	0.3	0.1

Changes that serve technical progress, as well as errors and misprints reserved 06/2019

Our most current General Sales Conditions shall apply.

Please consult the Product Data Sheet prior to any use and processing.

Actual Product Data Sheets and information about additional products please find in:

[www.sikaadvancedresins.com](http://www.sikaadvancedresins.com)



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