

SikaBiresin® MC80 SUSTAINABLE MODELS MADE WITH ADDITIVE MANUFACTURING

The sustainable 3D printing solutions with Sika Biresin® MC80 bring a lot of advantages compared to the conventional construction method with model boards:



no bonding and less milling effort



55 %
material savings
no lost mold and hollow construction



90 % less waste

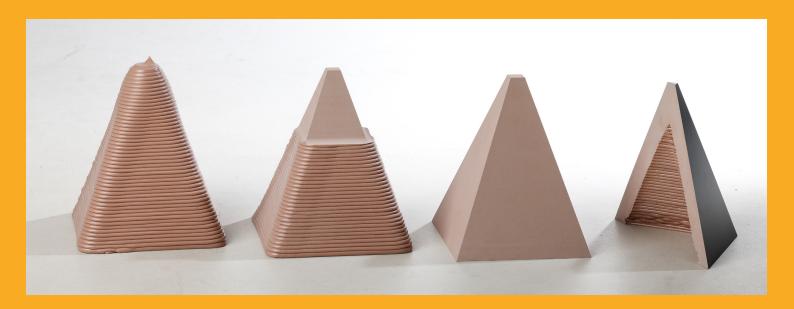
because of near-net shape construction



100 % surface quality

easy to paint and no bonding lines





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Already in the concept and design phase, SikaBiresin® MC80 is used used for Additive Maunufacturing. With the help of the CAD data, a near-net shape and dimensionally stable 3D polyurethane pre-model is built directly. The finished model is created by CNC milling with the highest precision and surface quality. This sustainable solution offers significant material and cost savings and eliminates the bonding effort from conventional block bonding, reduces milling times and additionally, the models are created without bonding joints, which improves the quality of their design.

AREAS OF APPLICATION	PRODUCT BENEFITS	PROCESS BENEFITS
■ Manufacture of design and prototype	■ High quality surface – no bonding lines	■ Direct and easy use of CAD data
models Manufacture of styling, cubing and master models	Low dust at good milling behaviourHigh compressive strength and edge stability	Fast production of models and simple molds (no cutting, no bonding)Less material and less wastage
Manufacture of simple molds for small series	■ Low CTE for high dimensional stability	■ No lost molds necessary

PHYSICAL DATA (APPROX. VALUES)			
Density	ISO 845	0.85 g/cm ³	
Shore-hardness	ISO 868	D 77	
Compressive strength	ISO 604	60 MPa	
Linear thermal expansion coefficient $\mathbf{a}_{ au}$	ISO 11359	55 · 10-6 K-1	
Glass transition temperature (Tg)	ISO 11359	70 °C	

Our most current General Sales Conditions shall apply.
Consult the Product Data Sheet prior to any use and processing.

Sika Deutschland GmbH Advanced Resins

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