



High-Performance EP and PUR Systems for TOOLING AND COMPOSITES

- BLOCK MATERIALS AND MODEL PASTES
- VACUUM CASTING RESINS AND RIM-SYSTEMS
- COMPOSITE AND LAMINATING SYSTEMS
- EP- AND PUR-CASTING RESINS
- ELASTOMERIC CASTING RESINS
- AUXILIARY MATERIALS

BUILDING TRUST



CREATING A STRONG FUTURE

YOUR ADDED VALUE

Reliability and Safety

Sika Advanced Resins is by your side as a strong global player. As an inherent part of the Swiss concern Sika AG you can rely on us.

Quality and Innovation

Our clients expect high-quality end products. Benefit from over 75 years of intensive expertise in the development of high-quality PUR and EP resins. With innovative and coordinated PUR and EP product systems, we help you to achieve end user satisfaction.

Flexibility and integrated solutions

As individual as your task. The comprehensive and integrated product range of Sika Advanced Resins offers you even more solutions for your applications.

Professional global support worldwide

Local experts provide you with personal on-site support in all issues relating to product processing and plant technology.

Global Availability

The consolidation of worldwide production sites, several development departments and our global dealer network maximizes the availability of our products – wherever you are located.



“As a global leader in Tooling and Composites, it is our aim to provide our customers with best in class innovative and tailor-made solutions. Being close to our customers is not only a word for us: Worldwide production and on-site support of our experts is the basis of our success. Every day, we are looking forward to create new and better solutions together with our customers.”

MORTEN MUSCHAK

Corporate Target Market Manager Industry



CUSTOMIZED SOLUTIONS FOR ...

- Foundry model making
- Automotive industry
- Transportation industry
- Sports and leisure
- Industrial applications
- Boat and yacht building industry
- Aviation industry
- Renewable energies
- Dielectrics



ADVANCED RESINS AS PART of Sika Industry and with over 75 years of experience, is a world leading provider and developer of high-performance resins, block materials and pastes for model and mould making. It offers customized solutions for the composite industry as well as structural adhesives. In addition, Advanced Resins offers technical casting for industrial filters.

Sika Industry is a part of Sika AG, which is headquartered in Baar Switzerland. Sika has subsidiaries in 100 countries worldwide with 300 manufacturing sites. It has approx. 25,000 employees, who generated annual turnover of CHF 8,1 billion.

Sika Advanced Resins

PRODUCT GROUPS



BLOCK MATERIALS AND MODEL PASTES

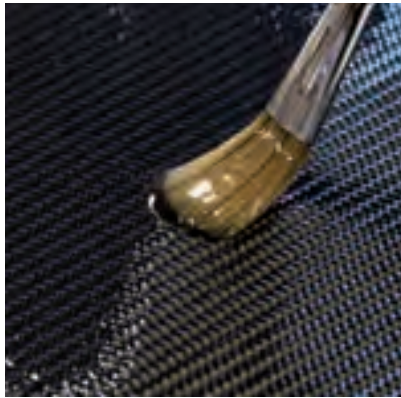
CNC milling 3D models and moulds

- Design and Styling Boards
- Model and Tooling Boards
- Model and Mould Making Pastes
- Mass-Casting

Specially formulated machinable boards with associated adhesives and putty fillers can be used for the construction of design/master models as well as for various manufacturing moulds and tools.

Extrudable pastes and mass-casting systems are tailor-made products for making joint-free, near net shapes in styling design, cubing models and diverse moulds in high-quality.

These materials provide since decades beneficial alternative solutions technically and/or economically versus traditional methods using wood or metal.



COMPOSITE AND LAMINATING SYSTEMS

Together they are strong

- High-Performance Composite Systems
- Gelcoats
- Laminating Systems

Composite resins are specially designed for the production of high-performance composites also giving good wetting of difficult fibre materials, variable viscosity for different production processes and application temperature ranges up to 225 °C.

Excellent processing and good resistance to external influences are the deciding features of gelcoats.

Our laminating and multipurpose resins can be used in different stages of manufacture in the construction of models, negatives, moulds and tools and result in high-grade laminates with excellent strength.



VACUUM CASTING RESINS AND RIM-SYSTEMS

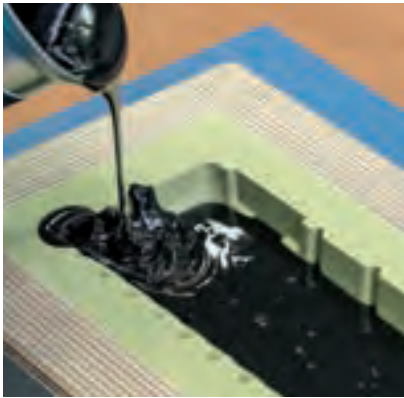
Time and cost-efficient production of complex mouldings

- Vacuum Casting Systems
- Low Pressure RIM-Systems

For rapid production our vacuum casting systems based on polyurethane are the perfect solution. They simulate the majority of characteristics of thermoplastic series materials without limits in shapes intricacy.

The same applies for low pressure RIM-systems, which are processed with the help of 2-component-mixing and metering machines. Our RIM products can be used for small and large volume parts and are suitable for high-class prototypes as well as short runs and serial production.

Regarding the availability of the products in your country please refer to your contact person.



EP AND PUR CASTING SYSTEMS

Everything made in one casting

- Fastcast Resins
- EP Casting Resins
- PUR Casting Resins

The large range of tooling resins can be used in many different ways. They are suitable for the quick and inexpensive manufacture of production equipment such as foam-, RIM- and vacuumforming moulds or foundry patterns and metal sheet forming tools.

There are also suitable casting resins for making auxiliary items such as master and core models or negatives.

Some fastcast resins are particularly dedicated to make scale models production, mock ups and prototypes.

The system selected depends on the casting procedure in question, e.g. mass casting, backfill or facecasting.

ELASTOMERIC CASTING RESINS

Flexible also with regard to possible applications

- Elastomeric Casting Resins for Mould Making
- Elastomeric Casting Resins for Foundry Pattern Making
- Elastomeric Casting Resins for Ceramics
- Elastomeric Casting Resins for Concrete Moulds and Building Tools

The range of elastomeric PUR-casting resins includes high-quality synthetic resin systems with a variety of shore hardness levels (Shore A 40-D 66) and possible applications.

The soft elastic types are used for making flexible moulds and mouldings.

The tough elastic and tough hard types are suitable for impact resistant parts and abrasion resistant liners in foundry pattern making and special mechanical engineering.

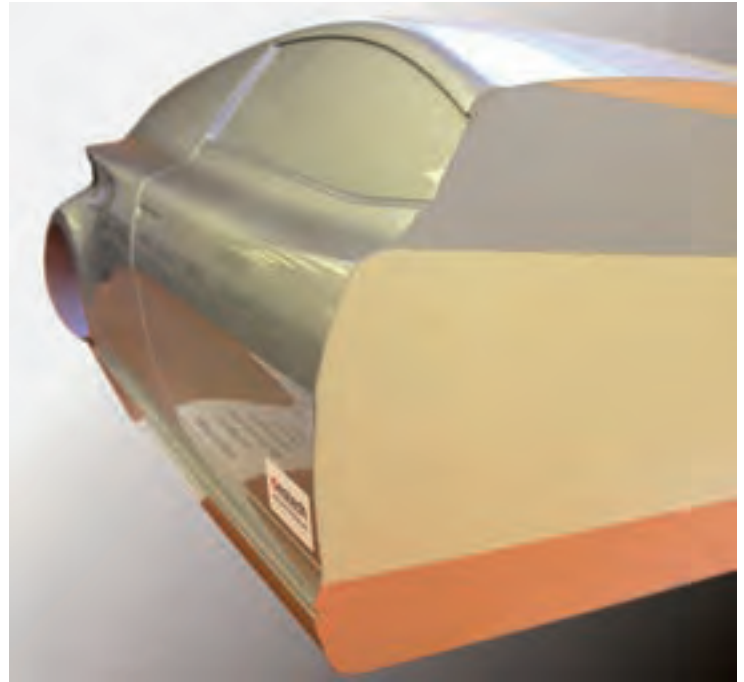
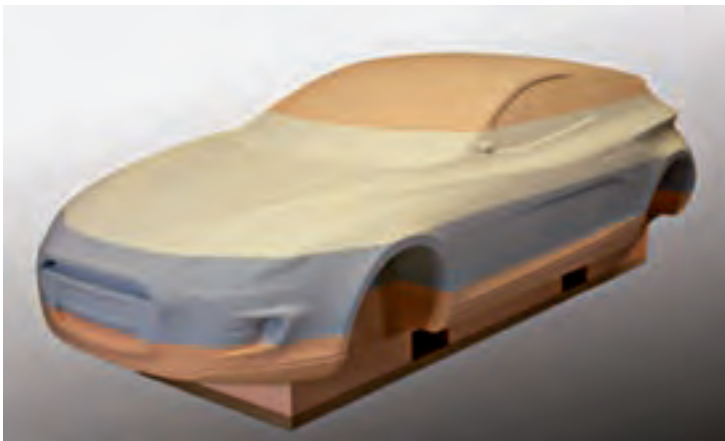
CONTENT

DESIGN AND STYLING BOARDS	06
MODEL AND TOOLING BOARDS	07
MODEL AND MOULD MAKING PASTES	10
MASS CASTING PRODUCTS	11
GELCOATS	12
LAMINATING SYSTEMS	14
COMPOSITE SYSTEMS	16
VACUUM CASTING SYSTEMS	18
SILICONES	21
LOW PRESSURE RIM-SYSTEMS	22
FASTCAST RESINS	24
PUR CASTING RESINS	25
EP CASTING RESINS	26
ELASTOMERIC RESINS	28
ADHESIVE AND PUTTY FILLER SYSTEMS FOR BOARDS AND PASTES	32
FILLING MATERIALS AND SURFACE PRE-TREATMENT	34

DESIGN AND STYLING BOARDS

DESIGN AND STYLING BOARDS

Light PUR foam boards are most favored materials that designers prefer to work with to create shaped forms or styling prototypes/models. These specially formulated boards are offered from 0.08 to 0.35 g/cm³ density with optimum balanced mechanical and thermal properties. All boards feature excellent machinability by hand or CNC milling, producing mainly shavings and minimal dust while delivering a fine and non-powdery surface.



Automotive design model made of Labelite range. The combination of superior surface quality and the use of dedicated adhesive Labelite Glue enables an easy painting with lowest appearance of glue lines.
Credit: Estech Design

DESIGN AND STYLING BOARDS

	SikaBlock® M80	Labelite 8 GY	SikaBlock® M150	Labelite 15 IY	SikaBlock® M330	Labelite 25YW	SikaBlock® M440	Labelite 35 OE
Density [g/cm³]	0.08		0.15		0.24	0.25	0.35	0.35
Colour	yellowish	grey	light green	ivory	siena	peach yellow	apricot	orange
Characteristics	fine and non-powdery surface; easily workable; low dust formation when milled				excellent surface quality; very good milling behaviour; with low dust formation			
Physical data (approx. values)								
Shore hardness	–	A 28	–	A 65	D 25	D 25	D 38	D 35
Flex. strength [MPa]	1.1	1.0	2.2	2.2	5	5.4	9	9
Compressive strength [MPa]	0.8	0.7	1.6	1.6	4	3.8	8	7
HDT [°C]	130	115	80	80	60	75	60	70
CTE, α _T [1/K]	60 x 10 ⁻⁶	40 x 10 ⁻⁶	65 x 10 ⁻⁶	65 x 10 ⁻⁶	65 x 10 ⁻⁶	60 x 10 ⁻⁶	65 x 10 ⁻⁶	60 x 10 ⁻⁶
Processing data (approx. values)								
Dimensions other dimensions on request	2000 x 1000 x thickness: 100/200/300/400/450	2000 x 1000 x thickness: 100/200	2000 x 1000 x thickness: 100/150/200/250/300/350/400	2000 x 1000 x thickness: 100/150/200	1500 x 500 x thickness: 50/100/200	1500 x 500 x thickness: 50/100/200	1500 x 500 x thickness: 50/75/100/150/200	1500 x 500 x thickness: 50/100/150/200
	2400 x 1300 x thickness: 100/200/400				2000 x 1000 x thickness: 50/100/150/200/250	2000 x 1000 x thickness: 100/150/200	2000 x 1000 x thickness: 50/100/150/200	2000 x 1000 x thickness: 50/100/150/200
Adhesive	SikaBiresin® B200				SikaBiresin® B200 / SikaBiresin® B260			
Filler	SikaBiresin® B370							

MODEL AND TOOLING BOARDS

MODEL AND TOOLING BOARDS

Medium density brown boards are the ideal material for making master models or moulds for short series of parts. From 0.45 to 0.70 g/cm³ we offer a complete range to satisfy every preference of model makers in mechanical strength, thermal resistance and of course surface aspect. Prolab boards display the smoothest surface aspect in such category in the market place while SikaBlocks® are thermally the most resistant and stable.



Full scale car model made of SikaBlock® M330 boards bonded with SikaBiresin® B260



High-quality master models made of SikaBlock® M600 N / 700 N provides highest dimensional accuracy

Models milled out of SikaBlock® PROLAB 65 fulfil highest demands of surface quality

MODEL AND TOOLING BOARDS						
	SikaBlock® M450	Labelite 45 PK	SikaBlock® M455	SikaBlock® M600 N	SikaBlock® PROLAB 65	SikaBlock® M700 N
Density [g/cm³]	0.45			0.60	0.70	0.70
Colour	orange	pink	apricot	light brown	brown	light brown
Characteristics	good economical grade	superior surface quality; good edge stability	superior surface quality; good edge stability	easily workable; fine, dense surface; good compressive strength and edge stability; good heat distortion temperature		
Physical data (approx. values)						
Shore hardness	D 45			D 58	D 65	D 64
Flex. strength [MPa]	12			19	29	25
Compressive strength [MPa]	10			-	-	25
HDT [°C]	78	65		77	77	78
CTE, α _T [1/K]	55 x 10 ⁻⁶			55 x 10 ⁻⁶	75 x 10 ⁻⁶	55 x 10 ⁻⁶
Processing data (approx. values)						
Dimensions [mm]	1500 x 500 x thickness: 50/75/100/150/200 2000 x 1000 x thickness: 50/100/150/200	1500 x 500 x thickness: 50/75/100/150	1500 x 500 x thickness: 50/75/100/150/200	1500 x 500 x thickness: 30/50/75/100/150/200	1500 x 500 x thickness: 30/50/75/100/150	1500 x 500 x thickness: 30/50/75/100/150/200
Adhesive	SikaBiresin® B260	SikaBiresin® B200 / SikaBiresin® B260		SikaBiresin® B260		
Filler	SikaBiresin® B370					

TOOLING BOARDS

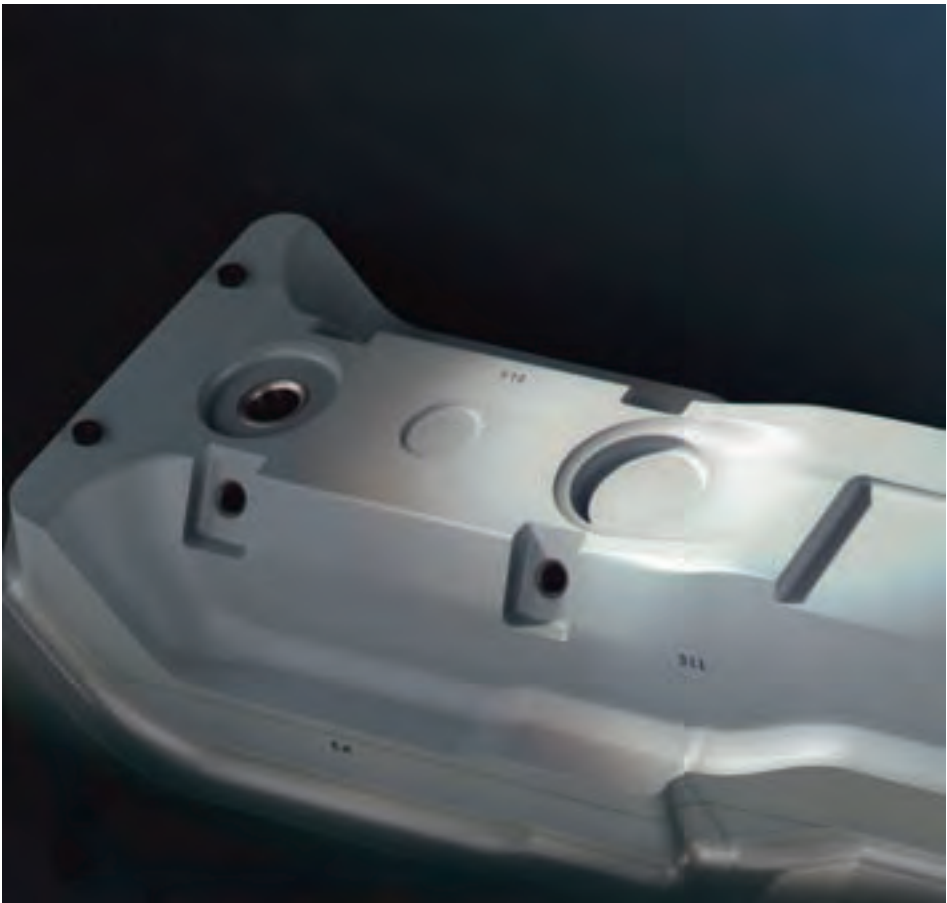
TOOLING BOARDS

For composites tooling we offer epoxy boards with very compact surface aspect, high dimensional stability under heat and pressure to produce prepreg moulds or parts in autoclave and up to 130 °C.

We offer medium to high density PUR tooling boards from 0.78 to 1.7g/m³ with high mechanical strength and sufficient heat resistance up to 100 °C combined with high dimensional stability.

Their performance package makes them suitable for applications such as checking fixtures, gauges, vacuum forming tools, low pressure RIM-moulds as well as metal sheet stamping tools.

Gauge with high dimensional accuracy milled out of SikaBlock® M1050



BOARDS FOR HIGHEST DIMENSIONAL STABILITY

	LAB 975 NEW	LAB 973	SikaBlock® M1000	SikaBlock® M1050	SikaBlock® LAB 1000
Density [g/cm³]	0.70	0.75	1.0	1.0	1.67
Colour	light green	blue	white	light grey	grey
Characteristics	new low density epoxy board with high dimensional stability under pressure and heat up to 130 °C; excellent performance/ price ratio	low density epoxy board with high dimensional stability under pressure and heat up to 125 °C; superior machinability and surface aspect	medium density, good compressive strength and edge stability; low thermal expansion and high dimensional stability		heavy-duty high density tooling board
Physical data (approx. values)					
Shore hardness	D 75 (D 68 @ 130 °C)	D 73 (D 63 @ 130 °C)	D 75	D 76	D 89
Flex. strength [MPa]	37	30	48	50	90
Compressive strength [MPa]	50	50	47	48	110
HDT [°C]	130	125	85	90	Tg= 92
CTE, α _T [1/K]	35–42 x 10 ⁻⁶	35–45 x 10 ⁻⁶	55 x 10 ⁻⁶	55 x 10 ⁻⁶	45 x 10 ⁻⁶
Processing data (approx. values)					
Dimensions [mm] other dimensions on request	1500 x 500 x thickness: 50/75/100/150/200	1500 x 500 x thickness: 50/75/100/150/200	1500 x 500 x thickness: 50/75/100	1500 x 500 x thickness: 50/75/100	830 x 500 x thickness: 30/50/75/100
Adhesive	H 8973		SikaBiresin® B180		



High durability with SikaBlock® M980
for foundry core boxes even in
complicated shapes

SikaBlock® M945 provides
excellent milling behaviour
with low dust formation

FOUNDRY TOOLING BOARDS

Sika Advanced Resins offers a wide range of tooling boards specially dedicated to make foundry patterns and cold core boxes.

Model-makers can select the most suitable board for their requirement in durability: abrasion resistance level from low to higher series of sand mouldings to be made as well as strength and dimensional stability.

These boards are cost-effective alternative solutions to metallic patterns and cold core boxes for most foundry processes up to medium size series.



BOARDS FOR TOOLS AND FOUNDRY						
	SikaBlock® M935	SikaBlock® M945	SikaBlock® M960	SikaBlock® LAB 920	SikaBlock® LAB 850	SikaBlock® M980
Density [g/cm³]	1.2	1.35	1.2	1.30	1.18	1.35
Colour	light green	green	blue	green	dark blue	blue
Characteristics	high dimensional stability; easy to mill; large length for less bonding points	good abrasion resistance; easy to mill; high strength	good abrasion resistance; easy to mill; good impact resistance		high abrasion resistance; excellent milling behavior; very high strength	excellent combination between good abrasion resistance and dimensional stability; very high strength
Physical data (approx. values)						
Shore hardness	D 82	D 83	D 78	D 83	D 79	D 86
Flex. strength [MPa]	74	100	80	70	57	145
Compressive strength [MPa]	74	95	70	69	47	120
Impact resistance	18	25	30	40	70-80	35
HDT [°C]	89	80	80	90	70	85
CTE, α _T [1/K]	56 x 10 ⁻⁶	65 x 10 ⁻⁶	85 x 10 ⁻⁶	88 x 10 ⁻⁶	110 x 10 ⁻⁶	60 x 10 ⁻⁶
Abrasion resistance	+	++	+++	++	+++	+++
Processing data (approx. values)						
Dimensions [mm] other dimensions on request	1500 x 500 x thickness: 30/50/75/100	1000 x 500 x thickness: 30/50/75/100	1000 x 500 x thickness: 30/50/75/100	1000 x 500 x thickness: 30/50/75/100	1000 x 500 x thickness: 50/75/100	1000 x 495 x thickness: 30/50/75/100
Adhesive	SikaBiresin® B180					

MODEL AND MOULD MAKING PASTES

MODEL & MOULD MAKING PASTES

Large size models and tools are made with extrudable PUR and epoxy pastes providing a workable surface applied onto a stable core substructure. This technique is widely used to make plugs for boats or wind blades as well as automotive or architectural designs. This technology is beneficial versus boards as offering lighter models with a smooth and seamless surface (joint-free unlike boards).

The PUR base allows for standard performance the fast-making of models without any post-curing.

The epoxy range provides higher dimensional stability and heat resistance for models or direct tooling applications in composite parts making.



Biresin® M72 paste can be milled easily with low dust formation



SikaBiresin® SC175 thixotropy enables vertical application in single layer and without sagging



43 m long boat hull made of SikaBiresin® SC175 with a perfectly smooth and seamless surface

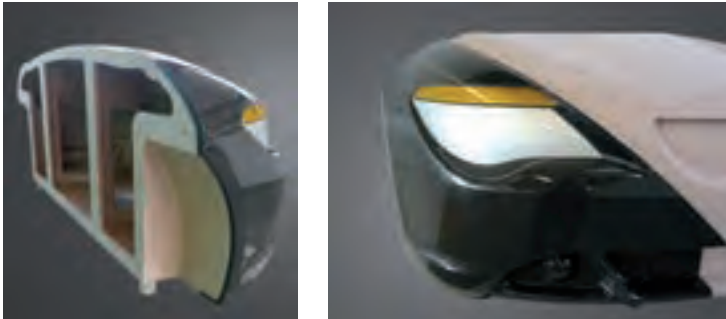
MODEL AND MOULD MAKING PASTES

Component	A	Biresin® M72	SikaBiresin® SC175	SikaBiresin® SC180	SikaBiresin® SC380	SikaBiresin® SC390	SikaBiresin® SC258
Component	B	Biresin® M70	SikaBiresin® SC175	SikaBiresin® SC180	SikaBiresin® SC380	SikaBiresin® SC390	SikaBiresin® SC258
Mixing ratio [g]	A	100	100	100	100	100	100
	B	45	100	100	100	100	100
Colour		brown	light grey	brown	grey	grey	light brown
Characteristics		PUR paste; fast curing; easily workable; fine, dense surface; easy to varnish	epoxy paste; very good surface aspect; good behaviour on vertical support up to 30 mm; high thermal resistance	medium density epoxy paste and hardness with short time before machining for epoxy; good thermal resistance	multi-purpose epoxy paste with good strength and heat resistance for high-quality models and moulds	medium density epoxy paste with high strength and heat resistance ideal for direct tooling	manual epoxy paste (hand or planetary mixer) applicable until 40 mm; quick hardening in thin coat and good adhesion on various supports (wood, PS/PUR foams, boards and on itself)
Processing data (approx. values)							
Viscosity [Pa s]	A	15,000 mPas	800	1,000	900	800	-
	B	175 mPas	800	900	800	800	-
Mixed viscosity [Pa s]		pasty	800	1,000	800	800	pasty
Pot life [min]		10 (after machine application)	-	-	-	-	65
Workable after [h]		8	24-48	16-18	24	12-16	12-18
Physical data (approx. values)							
Density [g/cm³]		0.9	0.63	0.81	0.82	1.08	0.60
Shore hardness		D 65	D 53	D 58	D 67	D 75	D 60
Flexural strength [MPa]		20	13	17	24	36	15
Compressive strength [MPa]		-	13	20	-	36	23
T _g [°C]		47	83	84	83	91	51
CTE, α _T [1/K]		-	70	80	60	58	48
Putty filler		SikaBiresin® B370	SC175/GC11	SC180/GC11	SC380/GC11	SC390/GC11	SikaBiresin® B370

MASS CASTING PRODUCTS

NEAR NET SHAPE CAST BLANKS OUT OF MODEL CAST RESIN Biresin® M67

The model casting resin based on polyurethane is casted by a specialized Sika Advanced Resins partner based on your requested dimensions to near net shape cast blanks. After postcuring this blanks can be milled easily and with only low dust generation to the final shape. The outstanding properties of the final products, e. g. design models are fine and dense surfaces without seams and with high dimensional accuracy which can be painted subsequently very good.



Near net shape casting with Biresin® M67 in thin wall thicknesses results in models of light weight

Services offered:

- «Made-to-size» forms = pick your preferred material from medium to high density boards and request a customized mass-casting
- Block Mass-Casting (BMC)
- Shape Mass-Casting (SMC)

In-house service and/or provided with dedicated partners. Sika Advanced Resins offers service on project-basis but also regular partnerships are welcomed. Consult and make Sika Advanced Resins your partner of choice for a customized solution.

Benefits:

- Reduced material costs
- Joint-free castings
- Sustainable as less waste
- Wide choice of technical performance as offered in boards range to match any application from modeling to tooling
- Quality
- Confidence

BIRESIN® NEAR NET SHAPE CAST BLANKS

	Biresin® M67	
Colour	light brown	
Characteristics	excellent surface quality; very good milling behaviour with low dust formation; good adhesion of paints; good mechanical properties	
Applications	design, styling or cubing models; light weight laminating moulds	
Processing data (approx. values)		
Dimensions	customized casting up to more than 1 m³; realization by specialized Sika partner, please contact our regional provider	
Filler	SikaBiresin® B370	SikaBiresin® SC258
Mixing ratio	100 : 2	100 : 100
Pot life	5 min	65 min
Setting time	> 20 min	12-18 h
Physical data (approx. values)		
Density [g/cm³]	0.86	
Shore hardness	D 67	
Flexural strength [MPa]	30	
CTE, α _T [1/K]	78 x 10 ⁻⁶	



Also huge models in scale 1:1 can be casted out of Biresin® M67 in one shot

GELCOATS

GELCOATS

Sika's specially formulated gelcoat for mould making offers high-quality products with easy application and required strength such as mechanical, thermal or chemical stress to resist to tooling constraints. Some grades in the range are polishable to obtain a shining mold surface that will transfer on the final part.

SikaBiresin® GC050:

- Proven standard gelcoat (white) for models and negatives
- SikaBiresin® GC14 hardener with longer pot life
- Good spreading and covering properties
- Easily workable

SikaBiresin® GC080:

- Blue gelcoat with good workability
- With SikaBiresin® GC11 hardener applicable on wet plaster (previously treated)
- With SikaBiresin® GC14 hardener better chemical and heat resistance for ceramic and RTM moulds (polyester)

GELCOATS WITH EASY WORKABILITY

	A	SikaBiresin® GC050		SikaBiresin® GC080		SikaBiresin® GC108
	B	SikaBiresin® GC11	SikaBiresin® GC14	SikaBiresin® GC11	SikaBiresin® GC14	SikaBiresin® GC08
Mixing ratio [g]	A	100	100	100	100	100
	B	10	10	10	10	20
Colour		white	white	blue / white	blue / white	black
Characteristics		good spreading and covering properties; easily workable		can be applied on wet plaster (previously treated), sandable and polishable	high resistance to chemicals; easy to apply	polishable to high gloss; heat resistant; good styrene resistance
Applications		master models, negatives, gauges		ceramic moulds; applicable on plaster models (previously treated)	ceramic moulds, RTM moulds (polyester)	vacuumforming moulds; master models; moulds for composite production
Processing data (approx. values)						
Pot life [min]		19	35	12	25	30
Geltime [min]		60	120	40	60	60
Demoulding time [h]		16	24	16	24	16-24
Physical data (approx. values)						
Density [g/cm³]		1,57	1.45	1,73	1,72	1.22
Shore hardness		D 88	D 88	D 91	D 90	D 86*
Flexural strength [MPa]		72	66	74	82	90*
HDT [°C]		-	-	-	-	136*
T _g [°C]		85*	53	100*	104*	-

* after appropriate treatment



Tool for making reinforcements of bonnets made of SikaBiresin® GC080



Easy application of SikaBiresin® GC119

GELCOATS WITH EASY WORKABILITY			
	A	SikaBiresin® GC112	SikaBiresin® GC119
	B	SikaBiresin® GC12	SikaBiresin® GC19
Mixing ratio [g]	A	100	100
	B	8	12
Colour		grey	black
Characteristics		heat resistant; abrasion resistant; good solvent and styrene resistance	high heat resistance
Applications		vacuumforming moulds, foundry patterns, moulds for composite production	vacuumforming moulds, prototype / test injection moulds, moulds for composite production
Processing data (approx. values)			
Pot life [min]		30	45-60
Geltime [min]		45	150-180
Demoulding time [h]		16-24	24
Physical data (approx. values)			
Density [g/cm³]		2,1	1.65
Shore hardness		D 92	D 89*
Flexural strength [MPa]		78	85*
HDT [°C]		> 100*	145*
T _g [°C]		-	158*

* after appropriate treatment

LAMINATING SYSTEMS

LAMINATING AND MULTIPURPOSE RESINS

Sika Advanced Resins laminating systems result in high-grade laminates with excellent strength.

SikaBiresin® LS100 / SikaBiresin® L202 :

- Proven standard laminating systems for multipurpose use (ordinary laminates, coupling layer and backfillings)
- SikaBiresin® LS100 with different hardeners to reach various viscosity and pot life
- SikaBiresin® L202 with low exothermic temperature for large moulds in ceramic industry

SikaBiresin® L402:

- Green standard laminating pastes which are easy to mix and to apply
- For fast reinforcement of large negatives, foundry patterns and diverse moulds of low weight
- SikaBiresin® L402 offers lowest density of 0.72 g/l for large lightweight laminates

SikaBiresin® L84:

- High-grade laminating system for multipurpose use
- Different hardeners to reach various viscosity and pot life
- With SikaBiresin® L84 T hardener for heat resistant moulds (e.g. vacuumforming)

STANDARD LAMINATING RESINS AND LAMINATING PASTES

	A	SikaBiresin® LS100				SikaBiresin® L202	SikaBiresin® L80			SikaBiresin® L402	SikaBiresin® L90
	B	SikaBiresin® LS100	SikaBiresin® L4	SikaBiresin® GC11	SikaBiresin® GC12	SikaBiresin® L202	SikaBiresin® CH80-1	SikaBiresin® CH80-2	SikaBiresin® GC12	SikaBiresin® L400	SikaBiresin® L90
Mixing ratio [g]	A	100				100	100			100	100
	B	12	18	19	16	12	15	15	12	14	14
Colour		yellowish-transparent				clear transparent	yellowish-transparent		amber	green	blue
Characteristics		all-purpose; variable pot life and viscosity				low odour; low exothermic temperature; good dimensional stability	white colour; filled; high dimensional accuracy			low density laminating paste; very easy to mix; very low shrinkage	high dimensional accuracy; very smooth and with good adhesion; very easy to mix; high thickness in one operation
Applications		ordinary laminates, coupling layers and backfillings				big moulds and negatives in ceramic industry	true-to-size laminates for gauges and models			for reinforcement of large negatives, models and moulds of low weight (e.g. foundry and ceramic industry)	for reinforcement of big negatives, models, moulds and tools; true-to-size laminate for difficult reinforcement layers
Processing data (approx. values)											
Mixed viscosity [mPas]		580	350	2,150	1,230	950	2,200	1,600	2,000	4,000	pasty
Pot life [min]		55	80	16	60	45	45	75	60	120	60
Demoulding time [h]		12	16	8	12	-	16-24	16-24	16-20	24	24
Physical data (approx. values)											
Density [g/cm³]		1.2				1.17	1.37		1.35	0.72	1.0
Shore hardness		D 83	D 80	D 84	D 82	D 86	D 86	D 86	D 85	D 80	D 73
Flexural strength [MPa]		95	88	95	96	90	85/100	90/100	75/80	42	50
HDT [°C]		51 / 70*	46 / 53*	50 / 61*	72*	-	52 / 70*	52 / 70*	54 / 80*	-	60
T _g [°C]		-	-	-	-	65	-	-	-	70	-

* after appropriate treatment



High-grade laminates with excellent strength can be achieved with Sika Advanced Resins laminating resins.

LAMINATING SYSTEMS WITH HIGHER HEAT RESISTANCE

	A	SikaBiresin® L84			SikaBiresin® CR172	SikaBiresin® CR190	
	B	SikaBiresin® L84	SikaBiresin® GC12	SikaBiresin® L84 T	SikaBiresin® CH170-3	SikaBiresin® CH190-4	SikaBiresin® L205
Mixing ratio [g]	A	100			100	100	100
	B	25	20	24	17	41	35
Colour		yellowish-transparent			colourless to brownish	amber	dark green
Characteristics		all-purpose, high mechanical strength and heat resistance			high heat resistance after post curing	MDA free; very good temperature resistance	
Applications		laminating moulds, vacuumforming moulds, heat resistant backfillings			injection moulds and other heat resistant moulds, prototype injection	heat resistant moulds, backfillings and composite structures	
Processing data (approx. values)							
Mixed viscosity [mPas]		390	1,090	590	800	2,000	650
Pot life [min]		40	20	60	110	150	300
Demoulding time [h]		24	24	24+ post curing	24+ post curing	24/RT + 24 h 60 °C	24/RT + 24 h 60 °C
Physical data (approx. values)							
Density [g/cm³]		1.1			0.94	1.12	1.09
Shore hardness		D 82	D 84	D 86	D 85	D 90	
Flexural strength [MPa]		76	130	131*	140	62	105
HDT [°C]		100*	91*	110*	162	-	-
T _g [°C]		104*	-	123*	170	190*	185

* after appropriate treatment

COMPOSITE SYSTEMS FOR WET LAY-UP

Systems especially designed for wet lay-up applications.
Good degassing behavior and non-draining properties support
the best quality of the final result.

SikaBiresin® CR122:

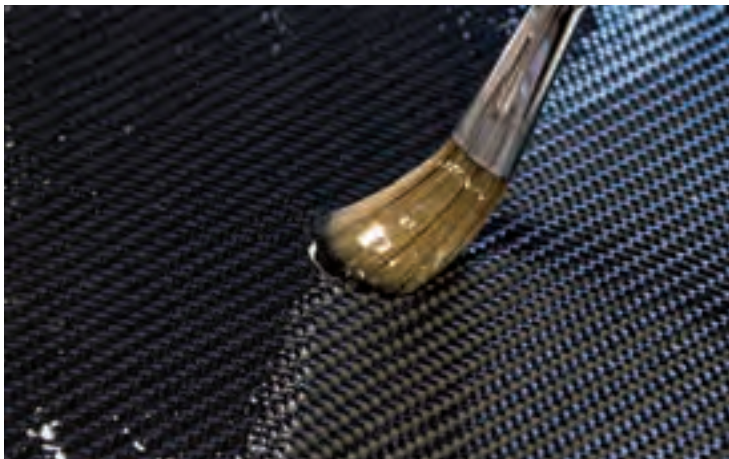
- High-performance 120 °C System
- Approved by the german aviation authority LBA (Luftfahrtbundesamt)
- Meets the standards of the European RHV-guidelines (Part 22)
- Can be used for the production of gliders, motor gliders and ultralights without any further approval

SikaBiresin® CR172:

- T_G potential of 174 °C
- Nontoxic system with a good price/performance ratio
- Very good wetting behavior for a high T_G system
- Especially suitable for moulds and parts with a high heat resistance



Motorglider produced by Schempp-Hirth with SikaBiresin® CR122



SikaBiresin® CR82 with optimized viscosity for wet lay-up

COMPOSITE SYSTEMS FOR WET LAY-UP																
	A	SikaBiresin® CR82				SikaBiresin® CR122				SikaBiresin® CR132				SikaBiresin® CR172		SikaBiresin® CR190
	B	CH80-1	CH80-2	CH80-6	CH80-10	CH122-1	CH122-3	CH122-5	CH122-9	CH132-2	CH132-5	CH132-7	CH122-9	CH170-3	CH172-6	CH190-4
Mixing ratio	A	100				100				100	100		100	100	100	100
	[g] B	27				30				40	28		32	38	17	19
Characteristics		modular 80 °C system with GL-approval; 4 hardeners provide a wide range of processing times and applications				modular 120 °C system with GL-approval and excellent properties; additionally approved by LBA/RHV to build gliders, motor gliders and ultralights				system with T _g up to 162 °C. e.g. suitable for high-performance moulds for wind blades				nontoxic high T _g system up to 174 °C		high T _g system e.g. suitable for moulds in aviation market or prepreg tools
T _g	[°C]	88	89	83	85	103	114	119	145	130	135	135	162	170	174	190
Pot life, 100 g/RT	[min]	30	50	220	330	30	90	150	330	60	150	210	480	110	220	150*
Mixed viscosity, RT	[mPas]	1.100	800	400	390	310	370	380	680	360	550	550	940	800	800	2.000*
Impact resistance	[kJ/m²]	17	21	55	56	58	47	34	44	47	32	33	25	28	26	-
Tensile E-Modulus	[GPa]	3.3	3.25	2.9	2.9	2.9	2.8	2.8	2.6	2.7	2.6	2.4	2.4	2.9	2.8	2.8***
Tensile strength	[MPa]	87	85	84	82	86	84	84	87	83	77	78	68	70	76	40
Elongation at break	[%]	4.3	5.0	6.4	6.2	6.3	5.4	5.6	6.9	6.6	4.6	5.7	3.9	3.0	3.9	-

* 500g, RT
** Brookfield LVT, RT
*** Flexural E-Modulus [GPa]

COMPOSITE SYSTEMS FOR VACUUMINFUSION

Infusionsystems with optimized viscosity and wetting properties guarantee a fast and proper fibre wet out.



Vacuuminfusion of a wind blade with SikaBiresin® CR131

SikaBiresin® CR83:

- System with extremely low mixed viscosity
- Especially designed for vacuuminfusion processes at lower temperatures (15–18 °C)
- GL-approved system with all 3 hardeners
- Very low tendency to crystallize
- Suitable for marine industry or for very big and/or complex parts



SikaBiresin® CR80 offers ideal flowing properties and good wetting behaviour

Lightweight transporter by Carbon Truck & Trailer

COMPOSITE SYSTEMS FOR INFUSION

	A	SikaBiresin® CR80			SikaBiresin® CR83				SikaBiresin® CR120		SikaBiresin® CR131			
	B	CH80-2	CH80-6	CH80-10	CH94-2	CH83-2	CH83-6	CH83-10	CH120-3	CH120-6	CH135-4	CH132-5	CH132-7	CH135-8
Mixing ratio [g]	A	100			100				100		100			
	B	30			24	30			30		26	28	32	21
Characteristics		modular 80 °C system with GL-approval; 3 hardeners provide a wide range of processing times and applications			modular 80 °C system with GL-approval with an extremely low viscosity and a low tendency to crystallize; especially for processing at lower temperatures or for big and/or complex parts				system with GL-approval with 2 hardeners and a T _c potential up to 115 °C		system with 4 hardeners for a wide range of processing times and a T _c potential up to 140 °C (e.g. suitable for wind blade moulds)			
T _c [°C]		93	85	85	97	84	80	81	113	115	138	136	127	138
Pot life, 100 g / RT [min]		60	190	330	60	60	180	300	90	180	160	140	260	260
Mixed viscosity, RT [mPas]		500	230	210	320	155	170	155	240	250	540	450	450	360
Impact resistance [kJ/m²]		29	68	76	41	93	84	83	55	50	27	46	37	29
Tensile E-Modulus [GPa]		2.9	3.0	3.0	3.0	3.0	3.2	3.1	2.8	2.7	2.8	2.7	2.7	2.8
Tensile strength [MPa]		83	83	80	78	84	91	86	80	80	89	86	84	89
Elongation at break [%]		5.8	6.3	6.5	4.6	6.7	8.4	7.9	5.8	6.1	5.7	5.9	6.7	6.3

* 500g, RT

** Brookfield LVT, RT

*** Flexural E-Modulus [GPa]

VACUUM CASTING SYSTEMS

VACUUM CASTING SYSTEMS

Sika vacuum casting systems are the optimal solution for complicated moulds and rapid prototyping. Vacuum casting process provides parts with best visual appearance and highest mechanical properties.

SikaBiresin® PX840:

- 3 components to cover all A shore range
- Low viscosity
- Easy to pigment

SikaBiresin® PX212 L5:

- Filled PP similarity
- Perfectly suitable for automotive parts
- High impact resistance
- Available in two reactivities

Front light lens made of
SikaBiresin® PX522



SOFT TO SEMI-RIGID SYSTEMS

Component	ISOCYANATE	A	SikaBiresin® PX761	SikaBiresin® PX840	SikaBiresin® PX205	SikaBiresin® PX212 L5	SikaBiresin® PX100
Component	POLYOL	B	SikaBiresin® PX761	SikaBiresin® PX840	SikaBiresin® PX205	SikaBiresin® PX212 L5	SikaBiresin® PX100
Component	EXTENDER	C	–	SikaBiresin® PX840 Extender	–	–	–
Mixing ratio	[g]	A	100	100	100	100	100
		B	45	100	50	100	100
		C	–	0–500	–	–	–
Colour			amber	off-white	amber to dark amber	translucent	off-white
Characteristics			fast demoulding; high reproduction accuracy; «moulded rubber» aspect; abrasion resistance; max. peak temperature: 100 °C	3 components for variable hardness; fixed mix ratio in between polyol & isocyanate; easy to tint; low silicone moulds aggressiveness	very good impact resistance; quick hardening; thermoplastic aspect; easy processing	low viscosity for easy casting; excellent impact resistance; fast demoulding	low viscosity; long pot life; good mechanical properties; can be painted
Applications			soft technical parts under vacuum process	prototype and short series of soft parts to cover all A shore range; fully compatible with ESSIL 291 silicone moulds	parts with high impact and abrasion resistance; hinge effect	thermoplastic-like parts with a flexural modulus of elasticity close to filled PP	cast by hand or vacuum machine to achieve ABS type large parts
Processing data (approx. values)							
Mixed viscosity	[mPas]		1,500	–	1,600	800	100
Pot life	[min]		8–12	13–15	12–15	4–6	15–20
Demoulding time	[min]		60–90	120	60	60–75	240
Physical Data (approx. values)							
Density	[g/cm³]		1.02	1.14	1.08	1.15	1.06
Shore hardness			A 63	A 95	D 70	D 76	D 78
E-Modulus	[MPa]		–	–	500	1,200	1,700
Tensile strength	[MPa]		–	19.6	25	40	38
Flexural strength	[MPa]		–	–	30	80	67
Elongation at break	[%]		1,000	660	100	25	4
Impact strength	[kJ/m²]		–	–	unbreakable	> 50	25
HDT	[°C]		–	–	55	78	–
T _g	[°C]		–	–	90–100	90	75

SikaBiresin® PX226:

- Filled ABS or Nylon similarity
- Household appliances; electrical components production
- Excellent ratio pot life/demoulding time
- Available in two reactivities

SikaBiresin® PX245:

- Stiffer product on the market
- Filled polyamide similarity
- High rigidity parts like electronic devices casings
- High reproduction accuracy
- Available in two reactivities



Pigmented stiff housing part



Vacuum casting process provides parts with best visual appearance and highest mechanical properties

TOUGH-HARD TO STIFF SYSTEMS

Component	ISOCYANATE	A	SikaBiresin® PX221	SikaBiresin® PX212 L5	SikaBiresin® PX226		SikaBiresin® PX300	SikaBiresin® PX245	
Component	POLYOL	B	SikaBiresin® PX221	SikaBiresin® PX225 L4	SikaBiresin® PX2645 L4	SikaBiresin® PX2645 L9	SikaBiresin® F55	SikaBiresin® PX2645 L4	SikaBiresin® PX2645 L9
Mixing ratio	[g]	A	100	100	100		80	100	
		B	45	80	50		100	40	
Colour			off-white	opalescent	white		yellowish-translucent	off-white	
Characteristics			high reproduction accuracy; can be easily pigmented with colouring CP; high impact resistance	good impact and flexural resistance; very easy coloring with all kind of pigments (non water based)	good impact and flexural resistance; available in two reactivity; high thermal resistance; can be easily coloured with CP pigments		very stiff; high flexural strength; impact resistance; simulates ABS, PVC	high flexural modulus of elasticity; high reproduction accuracy; available in two reactivities; can be easily coloured with CP pigments; fast demoulding	
Applications			prototype parts and mock-ups with mechanical properties similar to thermoplastics such as HiPS	thermoplastic-like parts with a flexural modulus of elasticity close to 2,500 MPa (ex: polycarbonate, ABS).	prototype parts and mock-ups with mechanical properties similar to thermoplastics like filled ABS		very stiff housings with high strength and impact resistance	prototype parts with mechanical properties similar to thermoplastics like polyoxymethylene and polyamide	
Processing data (approx. values)									
Mixed viscosity	[mPas]		350	600	2,000		600	2,200	
Pot life	[min]		7	4-5	4	7.5	4	4	8
Demoulding time	[min]		30-40	45	25	60	60-90	45	60
Physical Data (approx. values)									
Density	[g/cm³]		1.20	1.20	1.20		1.1	1.22	
Shore hardness			D 81	D 85	D 82		D 84	D 85	
E-Modulus	[MPa]		2,100	2,500	2,500		2,800	4,500	
Tensile strength	[MPa]		60	70	70		75	85	
Flexural strength	[MPa]		105	110	105		120	150	
Elongation at break	[%]		7.5	9	15		7	3	
Impact strength	[kJ/m²]		71	50	70		> 100	30	
HDT	[°C]		-	-	92		80	92	
T _g	[°C]		95	100	105		-	95	

SikaBiresin® PX523

- Water clear transparency
- Perfect suite for all parts with optical properties
- UV and weather resistant
- Casting up to 100 mm

SikaBiresin® PX223 HT:

- Leader on the market
- Low aggressiveness on silicone moulds
- Temperature and thermal resistance



Jewelry articles made of
transparently pigmented
SikaBiresin® PX 523

TRANSPARENT OR SPECIFIC USE SYSTEMS

Component	ISOCYANATE	A	SikaBiresin® PX521		SikaBiresin® PX223 HT	SikaBiresin® PX234 HT	SikaBiresin® PX280	SikaBiresin® PX331
Component	POLYOL	B	SikaBiresin® PX522	SikaBiresin® PX523	SikaBiresin® PX223 HT	SikaBiresin® PX234 HT	SikaBiresin® PX280	SikaBiresin® PX331
Mixing ratio	[g]	A	100	100	100	100	100	100
		B	50	62	80	50	80	100
Colour			transparent	transparent	black	light amber	off-white	off-white
Characteristics			high transparency (water clear); easy polishing; high reproduction accuracy; good UV resistance; easy processing; high stability under temperature		low viscosity for easy casting; good impact and flexural resistance; temperature resistance above 120 °C	good thermal resistance up to 190 °C; low viscosity; fast demoulding; good impact resistance; two pot lifes available; colourable	compliance with directive 10/2011; compliance with directive 2007/19/CE regarding food contact; compliance with FDA 21 CFR 177.2600 regulation for repeated use; good mechanical properties	fast demoulding; good thermal properties; self-extinguishing FAR 25 certified, UL 94 V0 in 3 mm according NF EN 60695-11-10; can be easily coloured with CP pigments
Applications			transparent parts until 10 mm thickness: crystal glass like parts, fashion, jewellery, art and decoration parts, lenses for lights	transparent parts until 100 mm thickness: crystal glass like parts, art and decoration parts	universal system to match ABS type thermoplastic when temperature resistance is required; good chemical resistance	all parts with very good thermal resistance such as: PA6.6, PPS, PEEK	can be cast by hand, 2K or vacuum machine to achieve ABS type parts; could be used for parts in contact with aqueous, acid and greasy foods; none homologated for liquid contact	all parts in general industry or aeronautic when requiring a fire classification
Processing data (approx. values)								
Mixed viscosity	[mPas]		500	500	850	250	450	700
Pot life	[min]		8	20	6-7	5	20	5-7
Demoulding time	[min]		60	45	45-75	60	120	45
Physical Data (approx. values)								
Density	[g/cm³]		1.06	1.06	1.14	1.19	1.19	1.35
Shore hardness			D 85	D 86	D 80	D 80	D 85	D 86
E-Modulus	[MPa]		2,400	2,100	2,300	1,850	2,800	3,700
Tensile strength	[MPa]		66	68	60	61	75	55
Flexural strength	[MPa]		110	100	80	80	117	133
Elongation at break	[%]		7.5	6	11	13	5	4
Impact strength	[kJ/m²]		48	42	> 60	41	25	26
HDT	[°C]		80	85	110	190-195	-	90
T _c	[°C]		95	100	> 120	220	80	100

SILICONES

ESSIL 291:

- Compatibility with PUR casting resins
- High surface quality even for clear parts
- Dimensional stability in use
- Exists with self bleeding version for longer ageing



Elastic mould produced by addition curing silicone Essil 291 for optical parts

Art and Deco cats in SikaBiresin® PX

SILICONES

Resin	A	ESSIL 291		ESSIL 125		ESSIL 222
Catalyst	B	ESSIL 291	ESSIL 292	ESSIL 125	ESSIL 124	ESSIL 222
Mixing ratio [g]	A	100		100		100
	B	10		5		100
Colour		transparent		white		light blue
Characteristics		high transparency; good chemical resistance towards polyurethanes; vulcanized by polyaddition; very easy to mix and to cast; very low shrinkage when hardening at room temperature; dry surface	self bleeding silicone. Improve moulds ageing; oily surface for better releasing and demoulding	vulcanized by polycondensation; high tear strength; available in slow and fast versions; high value for elongation at break; temperature resistance; thixotropic additive (ESSIL 126 THIXO)		vulcanized by polyaddition; very good temperature resistance; high tear strength; very low viscosity; quick setting time
Applications		soft negatives, flexible moulds for the prototype industry; ESSIL 291 silicone is particularly suitable for casting resins (PX range) in a vacuum casting machine; Essil 292 catalyst is advised to increase the number of parts in a same mould		achievement of soft negatives by casting process and soft skin moulds dedicated to detailed shapes with undercuts; prototyping applications or small-scale serial production for art and deco parts		flexible moulds for prototypes industry (gravity casting or under vacuum); self-demoulding moulds for decorative concrete parts
Processing data (approx. values)						
Mixed viscosity [mPas]		40,000	38,000	-	-	4,000
Pot life [min]		60		80	40	10
Demoulding time [h]		16		24	12	1
Physical Data (approx. values)						
Density [g/cm3]		-		1	1	1.13
Shore hardness (A)		A 38		A 24	A 25	A 22
Tear strength [N/mm]		24		17	19	20
Elongation at break [%]		350		-	550	380

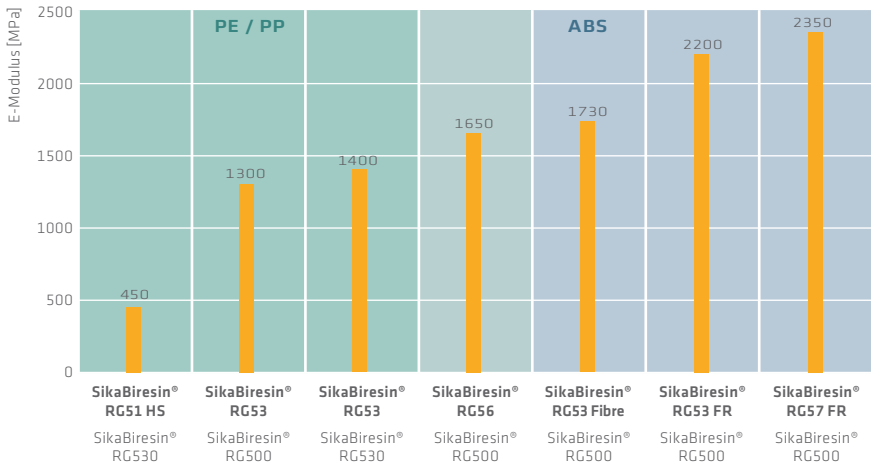
LOW PRESSURE RIM-SYSTEMS

LOW PRESSURE RIM-SYSTEMS

Sika offers a wide range of low pressure RIM systems for rapid production of small and medium series, covering the properties of thermoplastic systems.

SikaBiresin® RG53:

- Proven allrounder system with very easy processing
- Offers high impact resistance for PE/PP aspect housings
- With hardener SikaBiresin® RG500 for housings with good heat coverings



LOW PRESSURE RIM-SYSTEMS

Component	POLYOL	A	SikaBiresin® RG51 HS	SikaBiresin® RG53		
Component	ISOCYANATE	B	SikaBiresin® RG530	SikaBiresin® RG500	SikaBiresin® RG530	
Mixing ratio	[g] [ltr.]	A	100	100		
		B	50	75	80	
		B	43	62	66	
Colour			black / beige	black / beige / grey		
Characteristics			high impact resistant; wear resistant	allrounder system; very easy processing; high impact and good heat resistance		
Applications			shock-resistant housings and covers	housings and covers of medium stiffness		
Processing data (approx. values)						
Viscosity (Resin)	[mPas]		1,300	2,200		
Pot life	[sec]		60	60		
Demoulding time	[min]		10-20	> 10		
Physical data (approx. values)						
Density	[g/cm3]		1.15	1.2		
Shore hardness			D 65	D 78	D 80	
E-Modulus	[MPa]		450	1,300	1,400	
Flexural strength	[MPa]		20	54	58	
Impact strength	[kJ/m²]		no break	95	90	
HDT	[°C]		65	63 / 120*	60 / 110*	
T _g	[°C]		-	-	-	

* after appropriate treatment

SikaBiresin® RG53 FR and RG57 FR:

- Flame retardant RIM systems for stiff ABS aspect housings and coverings with good heat resistance
- SikaBiresin® RG53 FR with UL94 V-0 offers longer pot life for bigger parts
- SikaBiresin® RG57 FR tested according to DIN EN 45545-2



Housing of a lawn-mower with high mechanical properties

Automotive RIM part with complex geometry

	SikaBiresin® RG56	SikaBiresin® RG53 Fibre	SikaBiresin® RG53 FR	SikaBiresin® RG57 FR
	SikaBiresin® RG500	SikaBiresin® RG500	SikaBiresin® RG500	SikaBiresin® RG500
	100	100	100	100
	80	60	54	44
	-	-	52	-
	black	black	black / beige	dark grey / beige
	stiff, high flexural and impact strength; thermal resistant	stiff, low shrinkage; good heat resistance	flame retardant; thermal resistant; high strength and stiffness	flame retardant; thermal resistant; high strength and stiffness
	housings and covers with high mechanical properties	stiff housings and covers	stiff housings and covers with UL 94 V-0	stiff housings and covers with DIN EN 45545-2
	2,900	6,000	3,500	3,800
	50	50	75	55
	> 10	> 10	> 10	> 10
	1.18	1.2	1.27	1.30
	D 82	D 81	D 84	D 80*
	1,650	1,730	2,200	2,350
	67	55	70	70*
	60	48	35	20*
	100 / 125*	63 / 125*	110*	90*
	-	-	-	-

FASTCAST RESINS

FASTCAST RESINS – FILLED

POLYOL	A	SikaBiresin® F230	SikaBiresin® F40	SikaBiresin® F10	SikaBiresin® F21	SikaBiresin® F23
ISOCYANATE	B	SikaBiresin® F230	SikaBiresin® F40	SikaBiresin® F10	SikaBiresin® F21	SikaBiresin® F23
Mixing ratio [g]	A	100	100	100	100	100
	B	20	20	100	15	15
Colour		white	blue	ivory, green, black	light grey or black	lightblue
Characteristics		very good surface aspect after machining; easy to carve, to sand, to polish	high abrasion resistance; low shrinkage; low viscosity; quick setting; short pot life	1:1 mix ratio; short pot life; low viscosity; quick setting; good temperature resistance; low shrinkage	almost odourless; easy to mix by hand; very good flowability; very fine structure; very good mechanically workable	almost odourless; good mixable by hand; very good flowability; very low shrinkage; good adhesion to wooden materials; very good mechanically workable
Applications		tools and parts: thermoforming tools; checking fixtures; positioning fixtures; decorative applications when marble aspect is needed	tools as foundry patterns; core boxes, model plates and any type of castings requiring a good abrasion resistance	multipurpose system for tools: thermoforming tools; checking fixtures; positioning fixtures; prototype parts; foundry negatives	casting of master and core models, negatives and mouldings of medium size	casting of master and core models, negatives and mouldings of larger dimensions; for high surface quality and mould precision
Processing data (approx. values)						
Mixed viscosity [mPas]		900	2.000	2.500	2.100	1.500
Pot life [min]		4.25-5.25	5.25-6.30	4.45	5-6	7-8
Demoulding time [min]		30	60	45	30	120
Physical data (approx. values)						
Density [g/cm³]		1.58	1.70	1.64	1.7	1.7
Shore hardness		D 80	D 84	D 73	D 80	D 80
Flexural strength [MPa]		47	61	35	35	45
Compressive strength [MPa]		63	57	33	75	60
T _g [°C]		60	69	71	80	70

FASTCAST RESINS – UNFILLED

POLYOL	A	SikaBiresin® F160	SikaBiresin® F27			SikaBiresin® F27 LV	SikaBiresin® F180	SikaBiresin® F190
ISOCYANATE	B	SikaBiresin® F160	SikaBiresin® F27	SikaBiresin® F27 w.	SikaBiresin® F55	SikaBiresin® F26	SikaBiresin® F180	SikaBiresin® F190
Mixing ratio [g]	A	100	100			100	100	100
	B	100	100	100	80	100	100	100
Colour		beige	beige	white		beige	off white	beige
Characteristics		quick setting system; low viscosity; good temperature resistance after heat curing; easy-to-use mix ratio (1:1 by weight); adjustable filler content	easily workable; short demoulding time; very fine structure; high filler loading				quick setting system; reduced viscosity; low shrinkage; adequate viscosity even with high rate of filler	very low shrinkage; low viscosity even filled; easy to use mix ratio (1:1 by weight); high filler content possible
Applications		mainly used with filler for tools: moulds, masters, negatives with RZ 30150 to get easy machining; thermoforming tools with RZ 209/6 aluminium powder in order to increase thermal conductivity	models, core models, negatives, pattern, small and medium size art and craft articles with detailed shapes				mainly used for mock-ups and decorative parts using the unfilled product or filled with RZ 30150 to get low shrinkage and easy machining	same as SikaBiresin® F160 but able to cast up to 50 mm in one shot
Processing data (approx. values)								
Mixed viscosity [mPas]		90	50	30	140	35	80	125
Pot life [min]		2'20''	2'15''	2'15''	1'30''	2'20''	3'25''	7-9
Demoulding time [min]		30	> 20	> 20	> 15	> 15	45	90
Physical data (approx. values)								
Density [g/cm³]		1.08	1.1			1.1	1.08	1.07
Shore hardness		D 75	D 70	D 70	D 75	D 70	D 70	D 68
Flexural strength [MPa]		60	55	42	60	45	38	40
Impact resistance [kJ/m²]		14	25	60	50	23	18	20
HDT [°C]		-	80	75	75	75	-	-
T _g [°C]		110	-	-	-	-	97	90

PUR CASTING RESINS

FILLED FASTCAST RESINS

Filled fastcast resins are especially suitable for making e.g. master, core models, negatives and patterns with large dimensions and are characterized by low shrinkage.



UNFILLED FASTCAST RESINS

The unfilled fastcast resins are usually used for making detailed models and mouldings with thin walls due to their excellent flowability. They can, however, be cast in thicker layers by adding filling materials to them.

PUR Casting systems with long pot life

SikaBiresin® F46

- Prefilled casting resin can be cast in thick sections (e.g. backfilling)
- Results in durable core models with high dimensional accuracy

SikaBiresin® F48 and SikaBiresin® F50

- Offer lower viscosity and are used unfilled by face casting process
- Both systems can be filled with high filler loading to use them as high-grade mass casting systems with high strength values

SikaBiresin® F160 with additional fillers for casting of models with thicker sections

PUR CASTING SYSTEMS WITH LONG POT LIFE

POLYOL	A	SikaBiresin® F46	SikaBiresin® F48			SikaBiresin® F50	
ISOCYANATE	B	SikaBiresin® F46	SikaBiresin® F55			SikaBiresin® F50	
FILLER	C	–	–	TE-Füller	Al-Pulver	–	RZ 30150
Mixing ratio [g]	A	100	100	100	100	100	100
	B	25	100	100	100	50	50
	C	–	–	350	250	–	180-240
Colour		beige	opaque	beige	grey	beige	
Characteristics		easily workable; can be cast in thick sections; high dimensional accuracy	easily workable; high filler loading; abrasion and impact resistant	very low shrinkage; easily workable; can be cast in thick sections; high compressive strength		very low shrinkage; low exothermic reaction; casting in high thickness (400 mm) when filled	
Applications		master and core models, negatives, foundry patterns	facecasting layer for metal sheet forming tools and foundry patterns	backfilling for metal sheet forming tools and foundry patterns		unfilled for negatives, moulds and masters; filled version for higher volume casting; with RZ 209/6 for stamping tools with better surface gliding	
Processing data (approx. values)							
Mixed viscosity [mPas]		3,000	1,500	castable		350	7,500
Pot life [min]		40	45-60			35-50	–
Demoulding time [h]		16-24	16-24			6-12	
Physical data (approx. values)							
Density [g/cm³]		1.7	1.15	1.7	1.7	1.24	1.75
Shore hardness		D 87	D 80	D 86	D 84	D 83	D 85
Compressive strength [MPa]		110	94	104	90	85	90
HDT [°C]		80	75	–	–	–	–
T _g [°C]		–	–	–	–	–	65

EP CASTING RESINS

EP CASTING RESINS

Typical advantages of EP resins are their good resistance to mechanical, chemical or thermal influence and easy processing due to low shrinkage and low moisture sensitivity.

EP CASTING RESINS FOR TOOLING

SikaBiresin® G519:

- Black allrounder resin with good workability
- Offers good compressive strength and abrasion resistance (e.g. foundry patterns)

SikaBiresin® G32:

- Green filled casting resin for backfilling
- With SikaBiresin® L4 hardener for additional filler loading to reduce shrinkage

SikaBiresin® G33:

- Black filled casting resin offers highest abrasion resistance and dimensional accuracy

HEAT RESISTANT EP CASTING SYSTEMS

SikaBiresin® G36:

- Grey prefilled casting resin with high heat resistance
- Can be cast up to 100 mm thickness with G36 hardener (B)
- Offers highest heat resistance with hardener CH170-3 (B)
- Can be used as gelcoat with P7 hardener (B)

SikaBiresin® G38:

- With good flowing behaviour can be cast up to 40 mm
- Don't need to be post cured before demoulding



Vacuum forming mould for blister packaging out of SikaBiresin® G38

EP CASTING RESINS FOR TOOLING				HEAT RESISTANT EP CASTING RESINS	
	A	SikaBiresin® G519	SikaBiresin® G32	SikaBiresin® G36	SikaBiresin® G38
	B	SikaBiresin® G519	SikaBiresin® L4	SikaBiresin® G36	SikaBiresin® G38
Mixing ratio [g]	A	100	100	100	100
	B	10	7	10	7
Colour		black	green	grey	grey
Characteristics		multi-purpose with good workability; low shrinkage; good compressive strength and abrasion resistance	low viscosity; high filler loading for higher casting thickness	very low shrinkage; high abrasion resistance and compressive strength	low shrinkage, good workability, can be cast in thick sections, very high heat resistance, use as gelcoat with P7 (B)
Applications		production moulds, metal sheet forming tools, foundry patterns	backfilling in foundry pattern / mould making	vacuumforming moulds and other heat resistant tools	good flowing and degassing properties; high heat resistance; demoulding possible before post curing
Processing data (approx. values)					
Mixed viscosity [mPas]		24,500	1,700	6,000	18,000
Pot life [min]		80	70	45-60	60-120
Demoulding time [h]		24	24	16	24*
Physical data (approx. values)					
Density [g/cm³]		2.25	1.6	1.9	1.7
Shore hardness		D 90	D 90	D 90	D 89
Compressive strength [MPa]		110	112	120	130*
HDT [°C]		-	51	60 / 95*	141*
T _g [°C]		74	-	-	> 130*

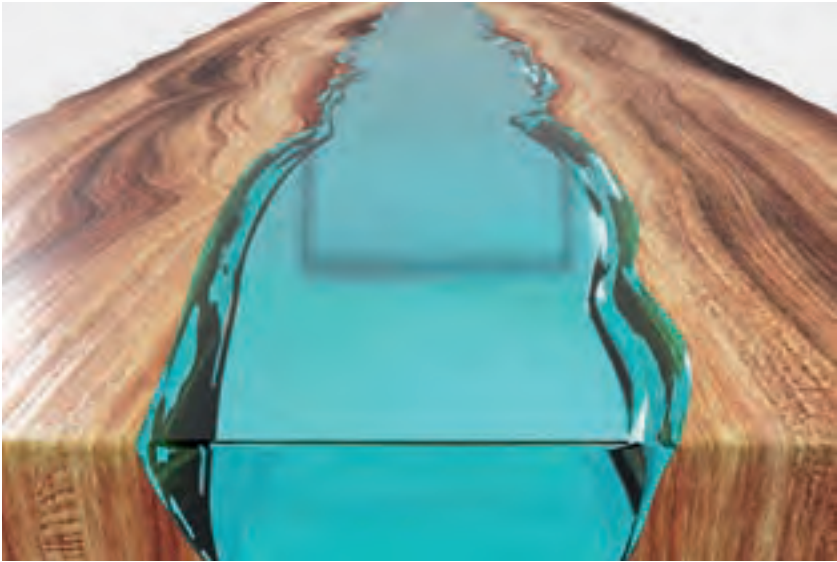
* after appropriate treatment

TRANSPARENT EP CASTING SYSTEMS

Sika's transparent EP systems offers high transparency and are mainly used for glass clear embedding and coatings of decorative arts and transparent parts.

SikaBiresin® TD150 systems:

- Multipurpose transparent epoxy casting system
- One resin with several hardeners suitable for various applications from deep pouring to thin coating
- Easy-to-use manually
- Excellent transparency
- Good UV resistance



Excellent transparency with SikaBiresin® TD150 systems



TRANSPARENT EP CASTING RESINS

	A	SikaBiresin® TD150		
	B	SikaBiresin® TD140	SikaBiresin® TD150	SikaBiresin® TD165
Mixing ratio [g]	A	100	100	100
	B	50	45	50
Colour		transparent	transparent	transparent
Characteristics		high transparency; low viscosity; self-degassing behaviour; good UV stability	high transparency; low viscosity; self-degassing behaviour; single pour casting up to 50 mm; good UV resistance	high transparency; easy mixing ratio 2:1; self-degassing behaviour; quick setting in thin layers; good UV resistance
Applications		applications in art and decoration, embeddings, river tables, mock-ups	applications furniture, art and decoration to make deep pour transparent and UV resistant castings such as river table, embeddings, mock-ups, trophies	applications in art and decoration to make transparent objects from 1 mm up to 10 mm such as thin inclusions, embeddings, wood surface sealing and coatings
Processing data (approx. values)				
Mixed viscosity [mPas]		220	300	500
Pot life [min]		depending on thickness, volume and room temperature		
Demoulding time [h]		depending on thickness, volume and room temperature		
Physical data (approx. values)				
Density [g/cm³]		-	-	1.00
Shore hardness		D 78	D 80	D 81
T _g [°C]		42	39	53

* tack free time

ELASTOMERIC RESINS

Elastomeric Casting Resins are high-quality PUR systems with a wide range of shore hardness levels (Shore A 40 to D 67) used in manifold application areas.

ELASTOMERIC CASTING RESINS FOR FOUNDRY PATTERN MAKING

The tough elastic systems are mainly used for high abrasion resistant liners (face casting process) for core boxes and match plates with long working life.

SikaBiresin® UR419:

- The low shore hardness of around A 97 offers highest abrasion resistance of core boxes also opposite the shooting nozzles due to the high rebound elasticity
- SikaBiresin® UR419 with 6–7 min pot life for small core boxes and short demoulding time

SikaBiresin® UR132 NT:

- Proven market leader of nontoxic foundry resins for series core boxes
- Standard hardener SikaBiresin® UR132 L Neu (B) works also for big castings up to 100 kg
- Sika Cleaner 205 increases bonding on prepared aluminium substructures

SikaBiresin® UR390:

- Provides higher shore hardness (D 67) and good heat resistance besides its good abrasion resistance
- Favourite product for match plates



Core box made of
SikaBiresin® UR322 NT

ELASTOMERIC CASTING RESINS FOR FOUNDRY PATTERN MAKING

ISOCYANATE	A	SikaBiresin® UR419		SikaBiresin® UR132 NT	SikaBiresin® UR390
POLYOL / AMINE	B	SikaBiresin® UR419	SikaBiresin® UR458	SikaBiresin® UR132 L Neu	SikaBiresin® UR390
Mixing ratio [g]	A	100		100	100
	B	16	18	40	50
Colour		coloured-transparent		beige	beige to dark beige
Characteristics		very high abrasion and impact resistance; high rebound elasticity; good flowability; fast demoulding		very high abrasion resistance; both components without toxic classification; simple hand casting without postcuring	good abrasion resistance and impact resistance; higher shore hardness and better heat resistance; low toxicity
Applications		smaller core boxes, areas / spots opposite the shooting nozzles		high abrasion resistant core boxes and match plates, also in larger sizes	core boxes and match plates with higher shore hardness and heat resistance (T _c ~100 °C)
Processing data (approx. values)					
Mixed viscosity [mPas]		2,800	4,000	8,000	1,500
Pot life [min]		6–7	20	16	14
Demoulding time [h]		1–3	16	> 16	16
Physical data (approx. values)					
Density [g/cm³]		1.1	1.1	1.15	1.08
Shore hardness		A 98 (D 54)	A 97 (D 45)	D 62	D 67
Elongation at break [%]		375	700	330	120
Abrasion resistance [mm³]		90	270	70	190

ELASTOMERIC CASTING RESINS FOR MOULD MAKING

The soft elastic types with very high elongation qualities are used for making flexible moulds (similar to silicone) and for castings made of the most varied of materials (even ceramic). The tough elastic products are suitable for more high-resistant moulds and mouldings as well as for wear-resistant coatings in special machine construction.

SikaBiresin® UR350:

- Rubber like elastomer; black color
- High mechanical properties
- Chemical resistance
- Exists in Shore A 80 & 85 (SikaBiresin® UR360)

SikaBiresin® UR409:

- New technology giving high properties
- Friendly use 1:1 ratio and low viscosity
- High frequency vibrations resistance



Soft shift gaiter made
by SikaBiresin® UR350

ELASTOMERIC CASTING RESINS FOR GENERAL MOULD MAKING

ISOCYANATE	A	SikaBiresin® UR404		SikaBiresin® UR340	SikaBiresin® UR350		SikaBiresin® UR303	SikaBiresin® UR305	SikaBiresin® UR409
POLYOL / AMINE	B	SikaBiresin® UR404	SikaBiresin® UR434	SikaBiresin® UR340	SikaBiresin® UR350	SikaBiresin® UR360	SikaBiresin® UR402	SikaBiresin® UR305	SikaBiresin® UR409
Mixing ratio [g]	A	80	50	100	100	100	100	100	100
	B	100	100	50	35	40	35	60	100
Colour		reddish-transparent	light-beige	light amber	black	black	coloured-transparent	cream-white / black	beige
Characteristics		very soft; high elongation; low shrinkage		low viscosity; low moisture sensitivity; good abrasion resistance; good dimensional stability	good tear resistance; very good hydrolysis and chemical resistance; high abrasion resistance; good elongation at break		intensive to moisture; rubbery; good tensile strength and elasticity; low shrinkage	high abrasion resistance; can be accelerated by SikaBiresin® HC586	insensitive to moisture; good tear strength and elasticity
Applications		ceramic industry, flexible moulds and components		production of parts requiring high properties (seals, soft moulds, sanding mask etc).	production of semi flexible moulds, forming tools or parts requiring good abrasion resistance and tear resistance properties		production of flexible moulds and components, ceramic and concrete industry	wear resistant coating, electronic encapsulation	flexible fixtures for parts for ultra sonic welding; elastic, flexible moulds
Processing data (approx. values)									
Mixed viscosity [mPas]		3,000	3,700	1,500	3,000	3,600	4,000	2,300	2,500
Pot life [min]		25	20	17	18	20	25	15-20	30
Demoulding time [h]		24	> 16	24	24	24	> 16	10-16	> 16
Physical data (approx. values)									
Density [g/cm³]		1.05	1.3	1.02	1.08	1.09	1.11	1.2	1.10
Shore hardness		A 40	A 55	A 63	A 80	A 85	A 81	A 89	A 92
Tear strength [N/mm]		7	9	24	67	83	18	27	12
Elongation at break [%]		> 600	> 600	1,000	620	810	400	300	650

SikaBiresin® UR763:

- Special filled elastomer for ceramic case moulds
- No moisture sensitivity
- No shrinkage in volume



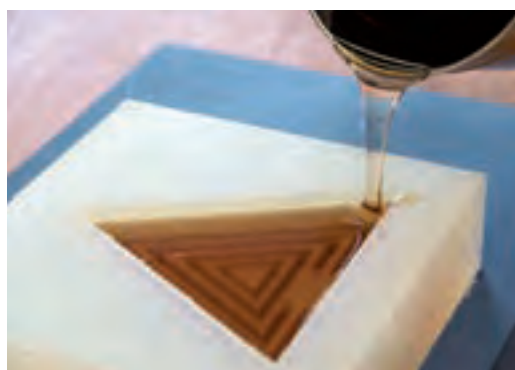
Release of SikaBiresin® UR548
soft mould for stone facing

ELASTOMERIC CASTING RESINS FOR CERAMICS

ISOCYANATE	A	SikaBiresin® UR406	SikaBiresin® UR701	SikaBiresin® UR303
POLYOL / AMINE	B	SikaBiresin® UR406	SikaBiresin® UR763	SikaBiresin® UR302
Mixing ratio [g]	A	100	50	100
	B	30	100	40
Colour		yellowish-transparent	pink	coloured-transparent
Characteristics		rubbery; high elongation at break; insensitive to moisture; excellent flowability at processing; good tensile strength and elasticity; very slow shrinkage	easy sanding after curing; homogeneous material; low moisture sensitivity; chemical resistance to release agents	rubbery, insensitive to moisture; good tensile strength and elasticity; choice of polyols for different hardness levels; very low shrinkage
Applications		casting of flexural moulds for ceramic industry; moulds for concrete mouldings; flexible mouldings	ceramic case moulds by hand casting	casting of flexural moulds for ceramic industry; moulds for concrete mouldings; flexible mouldings
Processing data (approx. values)				
Mixed viscosity [mPas]		2,800	3,000	3,800
Pot life [min]		15–20	20	25
Demoulding time [h]		> 16	16	> 16
Physical data (approx. values)				
Density [g/cm³]		1.05	1.34	1.03
Shore hardness		A 55	A 63	A 73
Tear strength [N/mm]		5	16	15
Elongation at break [%]		450	850	550

SikaBiresin® UR530:

- Soft filled elastomer for concrete moulds
- High chemical resistance
- Dimensional stability



Casting of SikaBiresin® UR404

SikaBiresin® UR595:

- Semi rigid elastomer for tools and parts
- 3 reactivity and 8 colors available
- Dedicated for concrete stamps; soft rulers; inserts in concrete casting



Mould out of SikaBiresin® UR503 for concrete casting

ELASTOMERIC CASTING RESINS FOR CONCRETE AND BUILDING INDUSTRY

ISOCYANATE	A	SikaBiresin® UR703		SikaBiresin® UR404	SikaBiresin® UR503			SikaBiresin® UR505	
POLYOL / AMINE	B	SikaBiresin® UR730	SikaBiresin® UR745	SikaBiresin® UR620	SikaBiresin® UR530	SikaBiresin® UR548	SikaBiresin® UR563 L20	SikaBiresin® UR572	SikaBiresin® UR595
Mixing ratio [g]	A	40	70	100	10	30	35	30	55
	B	100	100	40	100	100	100	100	100
Colour		beige	beige	reddish-transparent	beige	ochre	grey or beige	beige	coloured
Characteristics		low shrinkage after hardening; high elongation at break; low moisture sensitivity; good chemical resistance			high elongation at break; low hardness; chemical stability	high elongation at break; low viscosity; good mechanical resistance	high chemical resistance; good mechanical properties; two pot lifes available	easy processing; excellent tear strength; good chemical resistance	easy processing; good tear strength; high impact resistance; quick setting; available in 8 colours
Applications		production of moulds or flexible parts, by hand casting or with help of 2K machine; large volumes possible in one shot with SikaBiresin® UR745			production of intricate moulds for concrete industry	production of moulds for concrete industry by hand casting or with a 2K machine	production of moulds and tools for the concrete industry; especially dedicated to make soft moulds to cast concrete part in mass production	production of moulds or flexible parts, by hand casting or with 2K machine	production of semi-flexible parts or moulds; pot life adapted to process (hand or 2K machine)
Processing data (approx. values)									
Mixed viscosity [mPas]		2,300	2,450	6,500	4,000	2,000	2,500	1,000	1,000
Pot life [min]		40-60	40-50	10	15-20	15-20	15-20 (30 with Sika-Biresin® UR563 S)	15-20	various
Demoulding time [h]		24	18	> 16	24	16	16-24	24	12
Physical data (approx. values)									
Density [g/cm³]		1,16	1,14	1,1	1,35	1,31	1,31	1,25	1,25
Shore hardness		A 30	A 50	A 60-65	A 30	A 50	A 65	A 75	A 94
Tear strength [N/mm]		8.5	18	13	6	14	16.5	31	64
Elongation at break [%]		1,500	1,200	300	900	550	670	700	400

ADHESIVE AND PUTTY FILLER SYSTEMS FOR BOARDS AND PASTES

ADHESIVE AND PUTTY FILLER SYSTEMS FOR BOARDS AND PASTES

The adhesive and putty filler systems are specially adapted to Sika Advanced Resins boards. This relates to colour and mechanical-physical properties. This results in a similar behaviour regarding machinability and subsequent use in application.

ADHESIVES

In the development of adhesives, special attention is paid to achieving a sufficiently high degree of adhesive strength and rapid curing.



ADHESIVE FOR BOARDS						
	A	Labelite Glue	SikaBiresin® B260	Adekit® A130	SikaBiresin® B180	H 8973
	B	-	SikaBiresin® RG530	Adekit® A130	SikaBiresin® B180	-
Mixing ratio [g]	A	-	100	100	100	100
	B	-	65	100	32	14
Colour		dark amber	orange / brown	light amber	amber	blue
Basis		-	PUR	Epoxy		
Characteristics		dedicated 1K glue with no mixing; easy to apply and fast setting while giving same aspect as light density foams	dedicated glue for orange/ brown colored medium density boards with good balance open-time and setting time	2K quick setting epoxy adhesive for bonding small pieces together and allowing to mill within 30 min	2K thixotropic epoxy adhesive for easy application for large bonding works or for applications requiring heat resistance	dedicated adhesive system for bonding of LAB 973 or LAB9 75 NEW boards to each other
Suitable for boards references		all Labelite and M blocks from M80 till M450	Labelite 350E and 45PK, all Prolabs and M blocks from M440 till M700	all medium to high density boards		LAB 975 NEW and LAB 973
Processing data (approx. values)						
Consumption [kg/m²]		0.12-0.15	0.9	0.60-0.65	0.65-0.70	0.53
Open time		-	20 min	10 min	15 min	60 min
Setting time		2 h	6 h	30 min	16 h	16 h
Physical data (approx. values)						
Density [g/cm³]		1.15	0.8	1.15	1.16	0.78
Shore hardness		-	D 63	D 80	D 82	D 74
T _g [°C]		80	-	-	HDT: 90 °C	125



PUTTY FILLERS

The creamy-soft consistence of the putty fillers results in easy application properties. They are also suitable for levelling, repairing and moulding of models and negatives out of tooling resins, wood and metal etc. for model, mould and tool making.

Easymax perfect match repair putty to medium density boards having the same PUR chemistry with quick setting and odour-less

PUTTY FILLERS FOR BOARDS AND PASTES					
	A	SikaBiresin® B370	SikaBiresin® B375	Easymax	SikaBiresin® SC175 / SC180 / SC380 / SC390
	B	BPO-Paste	BPO-Paste	Easymax R	SikaBiresin® GC11
Mixing ratio [g]	A	100	100	100	100
	B	2	2	100	20 / 13 / 17 / 15
Colour		brown	white	grey, brown, beige	grey, brown
Basis		polyester		PUR	Epoxy
Characteristics		good adhesion; fast curing and non-tacky; easily sanded		quick setting low density 2K PUR putty for medium density brown boards; odor-free	epoxy mastic with similar properties as extrudable paste
Suitable for boards/ paste references		SikaBlock® PROLAB 65, SikaBlock® M600 N / M700 N	all medium to high density boards	SikaBlock® PROLAB 65, SikaBlock® M600 N / M700 N	SikaBiresin® SC175 / SC180 / SC380 / SC390
Processing data (approx. values)					
Pot life [min]		5	5	5	10
Setting time [min]		> 20	> 20	20	4 h
Physical data (approx. values)					
Density [g/cm³]		1.6	1.9	0.73	0.62 / 0.75 / 0.75 / 0.90
Shore hardness		D 70	D 75	D 64	D 57 / D 63 / D 64 / D 70

FILLING MATERIALS AND SURFACE PRE-TREATMENT

FILLING MATERIALS

These materials in powder and granulate form can modify different properties of laminating and casting resins:

- lower shrinkage and exothermic temperature and higher casting thickness
- higher compressive strength or thermal conductivity
- reducing of material costs

Regarding the availability of the products in your country please refer to your contact person.



FILLING MATERIALS

	Aluminium grit	Aluminium powder		LF-Füller	TE-Füller
		RZ 209/6	RZ 1476	RZ 30002	RZ 30150
Colour	silver to matt-grey	silver to matt-grey	white	grey	white
Delivery unit	25 kg paper bag	6 x 5 kg; 25 kg paper bag	7 kg paper bag	20 kg paper bag	25 kg paper bag
Description	aluminium granulate	aluminium powder	hollow glass microballon	aluminium silicate microballon	aluminium hydroxide powder
Applications	backfill castings with good thermal conductivity and good machinability	backfill castings and parts with good thermal conductivity and good machinability	syntactic foam	backfill casting with low density, light concrete mixes	backfill casting with good workability
Processing data (approx. values)					
Bulk density [g/cm³]	1-1.5	1.0	0.15	0.4	1.2
Mixture for example	SikaBiresin® G32 (A) Resin : Filler (100 : 100)	SikaBiresin® F27 (A) Resin : Filler (100 : 300)	SikaBiresin® F46 (A) Resin : Filler (100 : 100)	SikaBiresin® F27 (A) Resin : Filler (100 : 100)	SikaBiresin® F26 (A) Resin : Filler (100 : 250)
Physical data (approx. values)					
Density [g/cm³]	2.7	2.7	0.25	0.6-0.7	2.4
Grain [mm]	0.6-1.2	0-0.07 or < 0.063	0.1	0.01-0.25 or 0.3	0-0.032 or 0.07

SURFACE PRE-TREATMENT

High-grade release agents, cleaners and activators provide an optimal surface pre-treatment.



SURFACE PRE-TREATMENT

	Sika® Liquid Wax-815 *	Sika® Pasty Wax-818 *	Sika® Liquid Wax-852 *	Sika® Liquid Spray-872 *	Sika® Handclean	Sika® Reinigungsmittel 5	Sika® Activator 205
Colour	milky	whitish	whitish	transparent	orange/white	clear transparent	colourless
Delivery unit	6 x 0,71kg; 3,55 kg	8 x 0.45 kg	6 x 0.73 kg; 7.3 kg	6 x 400 ml	70 pcs/unit	1 l; 10 l	1 l; 0.25 l
Description	low viscosity wax dispersion; fast drying	pasty wax dispersion; fast drying	liquid greasy wax; fast drying	greasy wax in spray; silicone free	impregnated cloths with hand cleaning formula	mild solvent blend	primer with low viscosity for nonporous surfaces
Applications	release agent for EP- and PUR-systems in model making; for sealed, lacquered and metallic surfaces	release agent for EP- and PUR-systems in model making; for sealed, lacquered and metallic surfaces	release agent for PUR-systems in model making and silicones; can be used for porous surfaces	release agent for PUR-systems in model making and silicones	time saving fast cleaning of machines, tools and accessories	cleaning of tools and surfaces	increasing of bonding of elastomeric PUR-system (SikaBiresin® UR320 NT) on prepared aluminium substructures
Processing data (approx. values)							
Material consumption [g/m²]	brushed coats	70	50-100	70	-	-	30-60
	sprayed coats	30	-	30	30	-	-
Drying time [min]	5-10	5-10	5-10	5-10	-	-	10
Physical data (approx. values)							
Density [g/cm³]	0.71	0.84	0.73	0.73	-	-	-

* Names of release agents vary from one country to another.

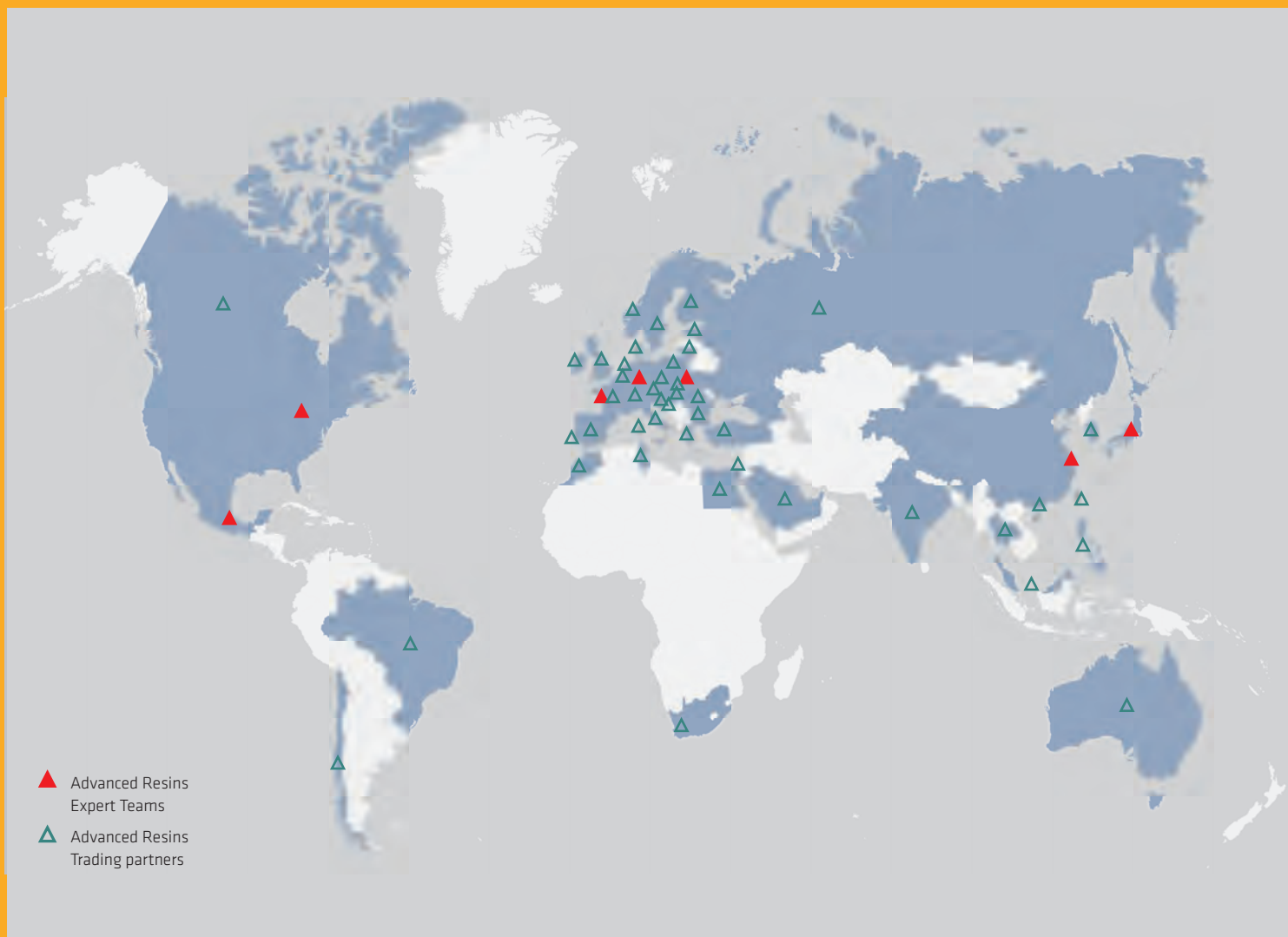
ADDITIVES

Additives are added to liquid systems in order to reach a specific thixotropy, thinning, acceleration or colouring of products.



ADDITIVES (thixotrope, acceleration, colouring)

	Stellmittel T	Biresin® HC 586 (catalyst)	Biresin® Colour Paste	CP Color
	RZ 55			
Colour	white	light yellow	white, black, green, red, blue, yellow, dark blue, pink, orange	white, black, green, red, blue, yellow
Delivery unit	1.0 kg	0.5 kg	8 x 0.5 kg	0.5 kg; Colorkit: 6 x 0,025 kg
Applications	light weight, non dusty powder for thixotrope of EP- and PUR-systems	acceleration of selected PUR-systems based on MDI technology in order to obtain a shorter demolding time	colouring of EP- and PUR-systems	Colouring and pigmentation of PUR vacuum casting resins, specific for the PX range



GLOBAL SOLUTIONS – LOCAL SERVICE

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.sika.com/advanced-resins



Sika Deutschland GmbH Advanced Resins

Stuttgarter Strasse 139
D-72574 Bad Urach
Germany
Phone: + 49 (0) 7125 940-7692

E-Mail: industry@de.sika.com
www.sika.com/advanced-resins

Sika Automotive France S.A.S. Advanced Resins

Z.I. des Béthunes - 15 rue de l'Équerre
CS 40444 Saint Ouen l'Aumône
95005 Cergy Pontoise Cedex - France
Phone: +33 (0) 134 40 34 60
Fax: +33 (0) 134 21 97 87

E-Mail: advanced.resins@fr.sika.com
www.sika.fr

BUILDING TRUST

