



# SIKA ADVANCED RESINS

## FILLING AND FAIRING PRODUCT GUIDE

BUILDING TRUST



# SIKA FILLING AND FAIRING COMPOUNDS

## PROVEN AND TRUSTED SOLUTIONS FOR A BROAD RANGE OF APPLICATIONS

Sika provides the industry's most unique and diverse range of filling and fairing compounds. Our product line includes high-performance, two-component, polyester, and epoxy systems capable of meeting requirements in applications ranging from the most basic pinhole filling, to full fairing/surfacing, to complex structural repairs. Sika's filling and fairing compounds offer superior performance properties, ease of use, and compatibility with common substrates encountered in automotive, transportation, marine, aerospace, and many other end markets. Within our portfolio, you can find the material that provides the perfect combination of hardness, working time, temperature resistance, and adhesive profile for your specific needs.

## POLYESTER SYSTEMS

Sika's polyester filling and fairing compounds are two-component systems, consisting of a polyester resin and benzoyl peroxide (BPO) cream hardener. They are excellent for everyday filling and fairing applications, providing fast sanding times, with select technologies offering high temperature resistance, flame retardancy, or below waterline capability. All polyester filling and fairing compounds are mixed 100 parts by weight of resin with 2 parts BPO.



Sika's polyester filling and fairing resin components are packaged conveniently in quart, gallon, and 3-gallon containers.



Sika offers BPO cream hardeners in black, white, and red in 1-ounce and 4-ounce tubes.

POLYESTER PRODUCTS	SIKABIRELIN® AP004	SIKABIRELIN® AP006	SIKABIRELIN® AP007	SIKABIRELIN® AP014	SIKABIRELIN® AP017	SIKABIRELIN® AP077	SIKABIRELIN® AP078	SIKABIRELIN® AP112	SIKABIRELIN® AP771	MICRO-ULTRA 15-3
Properties <sup>(A)</sup>										
Resin Color	White, Gray	Orange	White, Gray, Black	White, Gray	White, Gray, Black	White	White	White, Green	Off-White	White
Maximum Service Temperature	285°F	400°F	400°F	285°F	400°F	400°F	400°F	130°F	212°F	130°F
Pot Life/Working Time (Min.)	4 - 7	13 - 18	4 - 7	4 - 6	5 - 7	9 - 11	40 - 50	Green: 4-6 White: 8-10	8 - 13	4 - 8
Ready-to-Sand Time (Approximate, Min.)	15 - 20	20 - 30	15 - 20	15 - 20	15 - 20	15 - 20	120 - 240	15 - 30	15 - 25	15 - 20
Shore D Hardness	87 - 90	89	85	86	80	85 - 88	75	83	80	75 - 77
Styrene-Free		✓	✓		✓	✓	✓			
Specialty Applications										
Below Waterline			✓		✓	✓	✓			
Flame Retardant									✓	✓
Substrates <sup>(B)</sup>										
Epoxy	Excellent	Suitable	Excellent	Excellent	Excellent	Good	Excellent	Excellent	Good	Excellent
Wood	Excellent	Suitable	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Good	Good
Aluminum	Good	Suitable	Excellent	Good	Excellent	Good	Good	Excellent	Suitable	Excellent
Steel	Excellent	Suitable	Excellent	Good	Excellent	Good	Suitable	Excellent	Suitable	Excellent
FRP	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
SMC	Excellent	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Urethane Foam	Excellent	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Packaging										
Resin Packaging	Quart Gallon 3-Gallon	Quart	Quart Gallon	Quart Gallon 3-Gallon	Quart Gallon 3-Gallon	Quart Gallon	Gallon	Quart Gallon 3-Gallon	Quart 3-Gallon	Quart Gallon 3-Gallon

(A) Please see current Product Data Sheet for application instructions and full disclosure of technical data prior to use.

(B) Tests with actual materials and conditions have to be performed to ensure satisfactory performance. Substrates must be roughened and cleaned prior to use to promote adhesion.

All technical data stated in this table is based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

# EPOXY SYSTEMS

Sika's epoxy filling and fairing compounds are two-component systems consisting of a resin and hardener component. These systems provide superior adhesion and strength properties, as well as outstanding moisture and chemical resistance.

EPOXY PRODUCTS	SIKABIRESIN® AP100		SIKABIRESIN® AP861
Hardener	SikaBiresin® AP100-1 (B)	SikaBiresin® AP100-3 (B)	SikaBiresin® AP861-1 (B)
<b>Properties<sup>(A)</sup></b>			
Mixed Color	White	White	Light Brown
Mix Ratio (Parts by Weight)	100R / 22H	100R / 21 H	100R / 52H
Max. Service Temperature	130°F	117°F	136°F
Pot Life/Working Time	15 Minutes	61 Minutes	42-48 Minutes
Ready-to-Sand Time (Approximate)	4-6 Hours	16 - 24 Hours	6-8 Hours
Shore D Hardness	79	Data Not Available	76 - 81
<b>Specialty Applications</b>			
Below Waterline	✓	✓	✓
<b>Substrates<sup>(B)</sup></b>			
Epoxy	Excellent	Excellent	Excellent
Wood	Excellent	Excellent	Excellent
Aluminum	Excellent	Excellent	Excellent
Steel	Excellent	Excellent	Excellent
FRP	Excellent	Excellent	Excellent
SMC	Good	Good	Good
Urethane Foam	Good	Good	Good
<b>Packaging</b>			
Resin Packaging	5-Gallon, 55-Gallon		Quart, Gallon, 2-Gallon, 5-Gallon
Hardener Packaging	Gallon, 5-Gallon	Gallon, 5-Gallon	Quart, Gallon, 2-Gallon, 5-Gallon

(A) Please see current Product Data Sheet for application instructions and full disclosure of technical data prior to use.

(B) Tests with actual materials and conditions have to be performed to ensure satisfactory performance. Substrates must be roughened and cleaned prior to use to promote adhesion. All technical data stated in this table is based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.



SikaBiresin® AP100 Part A resin packaging



SikaBiresin® AP100-1 and AP100-3 Part B hardener packaging



SikaBiresin® AP861 Part A resin packaging



SikaBiresin® AP861-1 Part B hardener packaging

## The Leading Brand for Tooling and Composite Systems

For more than 75 years, Sika Advanced Resins has been a leading provider and developer of high-performance resins for the tooling and composite materials industry. We offer customized solutions, from the model and prototype phase, all the way to final part production.

### CUSTOMIZED SOLUTIONS FOR

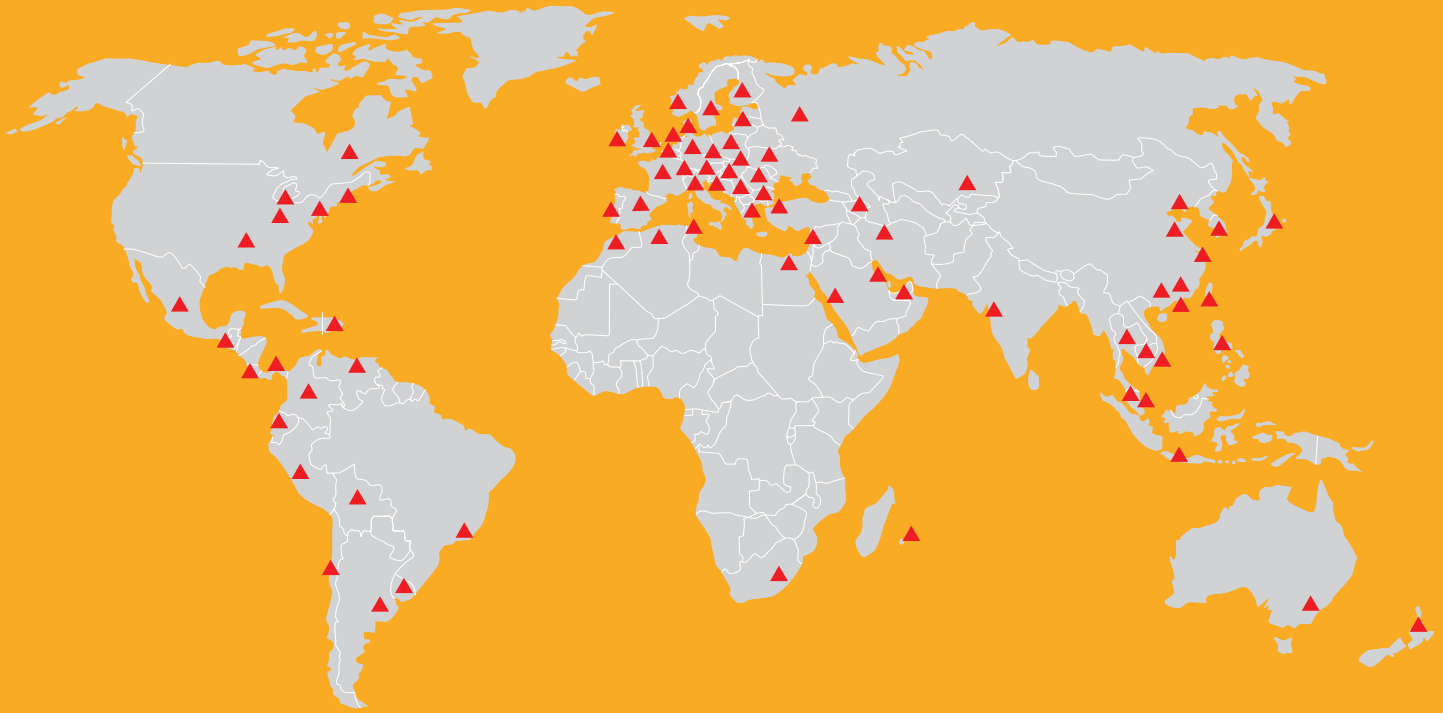
- Foundry model making
- Automotive
- Transportation
- Marine
- Aerospace
- Sports and leisure
- Renewable energy
- Dielectrics

### TECHNOLOGY RANGE

- Filling and fairing compounds
- Lamination and infusion systems
- Casting systems
- Machinable tooling board
- Extrudable tooling paste
- Surface coats
- Adhesives and sealants
- Structural adhesives



# GLOBAL BUT LOCAL PARTNERSHIP



Sika is a globally active company supplying the specialty chemicals markets. It is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting load-bearing structures in construction (buildings and infrastructure construction) and in industry (vehicle, building components, equipment production, solar and wind power).

Sika's product lines feature high-quality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring and membranes. Subsidiaries in more than 103 countries worldwide and more than 33,000 employees link customers directly to Sika.

## **NORTH AMERICAN PLANT LOCATIONS**

Eaton Rapids, Michigan  
Lakewood, New Jersey  
Lyndhurst, New Jersey  
Marion, Ohio  
Grandview, Missouri  
Montreal, Quebec

## **SIKA INDUSTRY**

30800 Stephenson Highway  
Madison Heights, MI 48071  
(248) 577-0020

## **NORTH AMERICAN SILICONE COMPETENCE CENTER**

995 Towbin Avenue  
Lakewood, NJ 08701

## **CONTACT US:**

[sikaindustry.com/advancedresins](http://sikaindustry.com/advancedresins)

## **CUSTOMER SERVICE**

1-800-688-7452

## **TECHNICAL SERVICE**

[tsmh@us.sika.com](mailto:tsmh@us.sika.com)

Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.** Sale of Sika products are subject Sika's Terms and Conditions of Sale available at <http://usa.sika.com/> or by calling 201-933-8800.