

PRODUCT DATA SHEET

SikaBiresin® CR107 (Formerly AL 2017)

Long Pot Life, Epoxy Laminating System for Room Temperature Applications

TYPICAL PHYSICAL PROPERTIES (FOR FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	SikaBiresin® CR107 (A) Resin	SikaBiresin® CH107-7 (B) Hardener
Composition	Epoxy	Amine
Mix ratio – by weight	100	28
Mix ratio – by volume	100	33
Aspect	Clear liquid	Clear amber liquid
Color (mixed)	n/a	Clear light amber
Viscosity – Brookfield (mixed)	n/a	1,250 cps
Density at 77°F (25°C) (mixed-cured)	n/a	9.09 lbs./gal (1.09 g/cc)
Pot life (100g) at 77°F (25°C)	n/a	215 Minutes

DESCRIPTION

SikaBiresin® CR107 epoxy laminating system is a specially formulated system for laminated parts or tools. It is suitable for use with glass, carbon, and aramid fabrics. It has a long pot life for extended working time. SikaBiresin® CR107 can be heated immediately after application to achieve a faster processing time.

PRODUCT BENEFITS

- Long pot life/working time
- High mechanical properties
- Excellent cloth wet-out
- Excellent dimensional stability

AREAS OF APPLICATION

Typical applications include wet lay-up, vacuum bagged, and RTM tools and parts. SikaBiresin® CR107 is also ideal for large tool and part applications due to its long pot life and working time.

Tests with actual materials and conditions have to be performed to ensure satisfactory performance.

TYPICAL MECHANICAL AND THERMAL PROPERTIES (NEAT FORM)

Properties, Test Method	SikaBiresin® CR107 (A) Resin	SikaBiresin® CH107-7 (B) Hardener
Hardness, Shore D, ASTM D2240	85	
Flexural strength, ASTM D790	18,800 psi (180 MPa)	
Flexural modulus, ASTM D790	512,000 psi (3,500 MPa)	
Tensile strength, ASTM D638	11,300 psi (78 MPa)	
Tensile strength, ASTM D638	530,000 psi (3,600 MPa)	
Glass Transition Temperature (Tg by DSC)	178°F (81°C)	
Coefficient of thermal expansion - TMA	72 ppm/°F (130 ppm/°C)	

Cured at 150°F for 2 hours

PROCESSING

After mixing resin and hardener to the required ratio, impregnate the reinforcement according to the selected process.

Accelerated cure schedule: The laminate can be immediately placed into 150°F (66°C) oven for two hours.

Normal cure schedule: Allow the laminate to set 24 hours at room temperature, then post-cure two hours at 150°F (66°C).

Normal health and safety precautions should be observed when handling these products:

- Ensure adequate ventilation
 - Wear gloves, glasses, and protective clothes
- For further information, please consult the Safety Data Sheets

STORAGE CONDITIONS

Shelf life of resin and hardeners is 12 months when stored in original, unopened containers between 65-77°F (15 - 25°C). Keep containers tightly closed.

PACKAGING INFORMATION

Packaging information is available upon request. Please contact your local Sika sales representative.

FURTHER INFORMATION

Advice on specific applications will be given on request. To contact Sika Corporation’s Industry Technical Services Department, send an email to tsmh@us.sika.com. Copies of Safety Data Sheets and Product Data Sheets are available upon request.

BASIS OF PRODUCT DATA

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

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates (“SIKA”), the user must always read and follow the warnings and

instructions on the product’s most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by contacting SIKA’s Technical Service Department via email at tsmh@us.sika.com. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product. 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 the product’s shelf life. User determines suitability of product for intended use and assumes all risks. User’s and/or buyer’s sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **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 to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling +1 800-933-7452.