BUILDING TRUST

PRODUCT DATA SHEET

SikaBiresin® CR96 FR (Formerly EL-322)

Flame Retardant, Epoxy Infusion/Laminating System

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

Properties	**SikaBiresin® CR96 FR (A) Resin**	**SikaBiresin® CH96-2 (B) Hardener**
Composition	Epoxy	Amine
Mix ratio – by weight	100	16
Aspect	Clear liquid	Clear liquid
Color (mixed)	Light amber	Light amber
Viscosity – Brookfield (mixed)	n/a	550 cps
Density at 77°F (25°C) (mixed)	n/a	9.76 lbs./gal
Pot life (100g) at 77°F (25°C)	n/a	49 Minutes

DESCRIPTION

SikaBiresin® CR96 FR is a halogen-free, flame retardant, epoxy laminating and infusion system developed for use in fabricating parts or repairs on structures that require flame retardant, self-extinguishing properties with room-temperature curing capabilities. The low mixed viscosity of SikaBiresin® CR96 FR also renders it suitable for vacuum infusion processes. This system does not contain PBDE, OBDE, or DBDE flame retardant additives.

PRODUCT BENEFITS

- Meets FAR 25.853 flame testing for aircraft interiors and other areas where flame retardant performance is required
- Non-halogen flame retardancy
- Self-extinguishing
- Epoxy (non-styrene)
- Excellent bond to all fabrics
- Low viscosity for good wet-out
- Vacuum infusion capable

AREAS OF APPLICATION

SikaBiresin® CR96 FR is suitable for vacuum bagging, infusion, or resin transfer molding applications. Areas of application include aerospace, transportation, architectural, and others.

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

TYPICAL MECHANICAL AND THERMAL PROPERTIES (NEAT FORM)[A]

Properties, Test Method	SikaBiresin® CR96 FR (A) Resin	SikaBiresin® CH96-2 (B) Hardener
Tensile strength, ASTM D638	8,388 psi (58 MPa)	
Tensile modulus, ASTM D638	720,666 psi (4,969 MPa)	
Tensile elongation, ASTM D638	9.0 %	
Flexural strength, ASTM D790	14,300 psi (99 MPa)	
Flexural modulus, ASTM D790	450,000 psi (3,103 MPa)	
Compressive strength, ASTM D695	15,214 psi (105 MPa)	
HDT (66 psi), ASTM D648	210°F (99°C)	
Impact strength (cast bar)	6.4 in-lbf/in	

[A)] Cure schedule: 24-Hour cure at 77°F (25°C) + 4 hours at 212°F (100°C)

FLAME RETARDENT PROPERTIES[B]

Test Description	Test Method	Test Results
(F1) 60 Second Vertical Burn, 90° Vertical Ignition Test	FAR/JAR 25.853	Pass
BSS 7239, Smoke Toxicity	FAR/JAR 25.853	Pass

[B)]FAR/JAR 25.853 Appendix F, Part Ì(a)(1)(i), (ii), (v) (4 ply 7500 Style E-Glass Laminate). Cure Schedule: 7 Days at 77°F (25°C) + 4 hours at 212°F (100°C)

PROCESSING

Alternative post-cure options can be used, if needed, in processing. Contact Sika Corporation's Industry Technical Services Department at tsmh@us.sika.com for additional information and advice.

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 24 months when stored in original, unopened containers between 65-77°F (15 - 25°C). Any opened can must be 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.

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