

PRODUCT DATA SHEET

Sikaflex®-2c NS EZ Mix

TWO-COMPONENT, NON-SAG, POLYURETHANE ELASTOMERIC SEALANT



PRODUCT DESCRIPTION

Sikaflex®-2c NS EZ Mix is a two-component, premium-grade, polyurethane-based, elastomeric sealant. It is principally a chemical cure in a non-sag consistency.

WHERE TO USE

- Intended for use in all properly designed working joints with a minimum depth of 6 mm (1/4 in).
- Ideal for vertical and horizontal applications.
- Can be applied at temperatures as low as +4 °C (39 °F).
- Adheres to most substrates commonly found in construction.
- An effective sealant for use in Exterior Insulation Finish Systems (EIFS).
- Submerged environments, such as canal and reservoir joints.

CHARACTERISTICS / ADVANTAGES

- Capable of ± 50 % joint movement
- Chemical cure allows the sealant to be placed in joints exceeding 13 mm (1/2 in) in depth for non-moving joint
- High elasticity with a tough, durable, flexible consistency
- Exceptional cut and tear resistance
- Exceptional adhesion to most substrates without priming
- Available in 35 standard architectural colours
- Colour uniformity assured via Color-pak system
- Non-sag even in wide joints

- Easy to mix
- Paintable with water, oil, and rubber-base paints
- Sikaflex®-2c Booster available for faster cure in cold weather
- Traffic grade available, see Sikaflex®-2c NS EZ Mix TG Product Data Sheet for specifications

ENVIRONMENTAL INFORMATION

- Conformity with LEED® v4 MR Credit (option 1): Building Product Disclosure and Optimization - Material Ingredients
- Conformity with LEED® v4 IEQ Credit: Low-Emitting Materials
- Conformity with LEED®v4 MR Credit (Option 1): Building Product Disclosure and Optimization - Sourcing of Raw Materials

APPROVALS / CERTIFICATES

- 2-hour UL Fire Rated Joint System Nos. FF-S-1034, FW-S-1020, HW-S-1018, WW-S-1037
- ANSI/NSF Standard 61 approved for potable water contact
- Meets ASTM C920, Type M, Grade NS, Class 25, use T, NT, M, G, A, O
- Meets Federal Specification TT-S-00227E, Type II, Class A
- Meets Federal Specification TT-S-001543A
- Meets Federal Specification TT-S-00230C
- Meets CAN/CGSB 19.24 - M90
- USDA approved
- Canadian Food Inspection Agency (CFIA) acceptance
- Ministry of Transport Québec (MTQ) acceptance
- UL certified to CAN/ULC-S115-05: Standard Method of Firestop Systems and to ANSI/UL 2070: Fire Resistance of Building Joint Systems (FF-S-1034, FW-S-1020, HW-S-1018, WW-S-1037) for use in Canada

PRODUCT INFORMATION

Packaging	5.7 L and 11.4 L units (1.5 and 3 US gal. units) Color-pak and Sikaflex®-2c Booster sold separately.
Shelf Life	1 year in original, unopened packaging.
Storage Conditions	Store dry at temperatures between +4 °C and +35 °C (39 °F and 95 °F). Condition product between +18 °C and +24 °C (65 °F and 75 °F) before using.
Colour	35 standard architectural colours are available. Special colours available on request.
Volatile organic compound (VOC) content	< 64 g/L

TECHNICAL INFORMATION

Shore A Hardness	25 ± 5	(ASTM D2240)						
Tensile Strength	0.62 MPa (90 psi)	(ASTM D412)						
Modulus of Elasticity in Tension	0.48 MPa (70 psi)	(ASTM D412)						
Elongation at Break	300 %	(ASTM D412)						
Adhesion in Peel	<table border="1"> <thead> <tr> <th>Substrate</th> <th>Peel Strength</th> <th>% Adhesion loss</th> </tr> </thead> <tbody> <tr> <td>Concrete</td> <td>> 2.63 N/mm (> 15 lb/in)</td> <td>Zero</td> </tr> </tbody> </table>	Substrate	Peel Strength	% Adhesion loss	Concrete	> 2.63 N/mm (> 15 lb/in)	Zero	(Fed Spec. TT-S-00227E)
Substrate	Peel Strength	% Adhesion loss						
Concrete	> 2.63 N/mm (> 15 lb/in)	Zero						
Tear Strength	7.88 N/mm (45 lb/in)	(ASTM D624)						
Service Temperature	-40 °C to +77 °C (-40 °F to 170 °F)							
Chemical Resistance	Good resistance to water, diluted acids, diluted alkalines, and residential sewage. Consult Sika Canada for specific data.							
Resistance to Weathering	Excellent							

APPLICATION INFORMATION

Yield	Linear Metre of Sealant per Litre				
	Width mm (in)	Depth 6 (¼)	13 (½)	19 (¾)	25 (1)
6 (¼)	24.8				
13 (½)	12.4	6.2			
19 (¾)	8.3	4.1	2.8		
25 (1)	6.2	3.1	2.1	1.6	
32 (1¼)	5.0	2.5	1.7	1.2	
38 (1½)	4.1	2.1	1.4	1.0	

	Depth	
Width	32 (1¼)	38 (1½)
mm (in)		
6 (¼)		
13 (½)		
19 (¾)		
25 (1)		
32 (1¼)	1.0	
38 (1½)	0.8	0.7

Ambient Air Temperature	+4 °C to +38 °C (39 °F to 100 °F)		
Substrate Temperature	+4 °C to +38 °C (39 °F to 100 °F) Sealant should be installed when joint is at mid-range of its anticipated movement.		
Curing Rate	Tack-Free	8-10 hours	(ASTM C679)
	Final cure	3 days	

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

Properties tested at +23 °C (73 °F) and 50 % R.H. unless stated otherwise.

LIMITATIONS

- The ultimate performance of Sikaflex®-2c NS EZ Mix, depends on good joint design and proper application.
- Some substrates require priming. Please refer to the Sikaflex® Primers Product Data Sheet or contact Sika Canada.
- Although applying sealants over paints, sealers or coatings is not recommended within the industry, where it cannot be avoided, it is always necessary to test for adhesion. It should also be recognized that the existing paint, sealer or coating will dictate bond values and possibly the integrity of a subsequently applied sealant and thus the performance of the joint.
- Minimum depth in working joint is 6 mm (1/4 in).
- Maximum expansion and contraction should not exceed 50 % of average joint width.
- Avoid contact with materials or surfaces impregnated with, or containing, oil, asphalt, tar or bituminous substances.
- Do not apply or cure in the presence of uncured silicone sealants, alcohol and other solvent cleaners.
- Allow three (3) day cure before subjecting sealant to total water immersion.
- Avoid exposure to high levels of chlorine (Maximum level is 5 ppm).
- Do not apply when moisture vapour transmission exists since this can cause bubbling within the sealant.
- Avoid over-mixing sealant.
- Light colour shades tend to yellow over time when

exposed to ultraviolet rays.

- When overcoating, an on-site test is recommended to determine actual compatibility.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

All joint surfaces must be clean, sound, dry and frost-free. Joint walls must be free of oils, tar, asphalt, bitumen, grease, paints, coatings, sealers, curing compound residues, and any other foreign matter that might prevent adhesion. Ideally this should be accomplished by mechanical means. Bond breaker tape or backer rod must be used in bottom of joint to prevent bond.

Priming

Priming is typically not necessary. Most substrates only require priming if sealant will be subjected to water immersion after cure. Testing should be done, however, on questionable substrates, to determine if priming is needed. Contact Sika Canada or consult Sikaflex® Primers Product Data Sheet for additional information on priming.

Note: Most Exterior Insulation Finish Systems (EIFS) manufacturers recommend the use of a primer. When EIFS manufacturer specifies a primer or if on-site bond testing indicates a primer is necessary, Sikaflex®-429 Primer is recommended. On-site adhesion testing is recommended with final system prior to the start of a

job.

MIXING

Pour entire contents of Component B into pail of Component A. Add entire contents of Color-pak into pail and mix with a low-speed drill (400 - 600 rpm) and proper mixing paddle. Mix for three (3) to five (5) minutes to achieve a uniform colour and consistency. Scrape down sides of pail periodically. Avoid entrapment of air during mixing.

Note: When mixing in cold weather < +10 °C (50 °F), do not force the mixing paddle to the bottom of the pail. After adding Component B and Color-pak into Component A, mix the top 1/2 to 3/4 of the pail during the first minute of mixing. After scraping down the sides of the pail, mix again for another minute. The paddle should reach the bottom of the pail between the first and second minute of mixing. Scrape down the sides of the pail a second time and then mix for an additional two (2) to three (3) minutes until the sealant is well blended. When using Sikaflex®-2c Booster, add entire contents into Component A prior to mixing.

Note: When mixing 11.4 L (3 US gal.) unit, two containers of Component B and two Color-paks must be used. Colorpak must be used with tint base. For pre-pigmented Limestone, just mix with low speed drill and Sikaflex® paddle (no Color-pak needed).

APPLICATION METHOD / TOOLS

Recommended application temperatures: +4 °C to +38 °C (39 °F to 100 °F). Pre-conditioning units to approximately +21 °C (70 °F) is necessary when working at extremes. Move pre-conditioned units to work areas just prior to application. Apply sealant only to clean, sound, dry, and frost-free substrates. Sikaflex®-2c NS EZ Mix should be applied into joints when joint slot is at mid-point of its designed expansion and contraction.

To place, load directly into bulk gun or use a follower plate loading system. Place nozzle of gun into bottom of joint and fill entire joint. Keeping the nozzle deep in the sealant, continue with a steady flow of sealant preceding nozzle to avoid air entrapment. Also, avoid overlapping of sealant since this also entraps air. Tool as required. Proper joint design for moving joints is 2:1 width to depth ratio, with a recommended 6 mm (1/4 in) minimum and 13 mm (1/2 in) maximum depth of sealant. For non-moving joints, the width to depth ratio

can vary. To accelerate the cure of Sikaflex®-2c NS EZ Mix in cold weather temperatures, add Sikaflex®-2c Booster.

CLEAN UP

Uncured material can be removed from equipment and tools using Sika® Urethane Thinner and Cleaner. Cured material can only be removed manually or mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

The information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca

Sika Canada Inc.

Head Office
601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9
1-800-933-SIKA
www.sika.ca

Other locations

Boisbriand (Quebec)
Brantford; Cambridge;
Sudbury; Toronto (Ontario)
Edmonton (Alberta)
Surrey (British Columbia)

Product Data Sheet

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