BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-2c NS EZ Mix

Two-component, non-sag, polyurethane elastomeric sealant

DESCRIPTION

Sikaflex®-2c NS EZ Mix is a 2-component, premium-grade, polyurethane-based, elastomeric sealant. It is principally a chemical cure in a non-sag consistency. Meets ASTM C 920, Type S, Grade NS, Class 25, use T, NT, M, G, A, O, I and Federal specification TT-S-00230 C Type II, Class A. Meets Canada Standard CAN/CGSB 19.24 - M90.

USES

- Intended for use in all properly designed working joints with a minimum depth of 6 mm.
- Ideal for vertical and horizontal applications.
- Placeable at temperatures as low as 5 °C.
- 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.

FEATURES

- Capable of ±25 % joint movement.
- Chemical cure allows the sealant to be placed in joints exceeding 12 mm. in depth.
- High elasticity with a tough, durable, flexible consistency.
- Exceptional cut and tear resistance.
- Exceptional adhesion to most substrates without priming.
- Available in 35 architectural colors.
- Color uniformity assured via Color-pak system.
- Available in pre-pigmented Limestone Gray (no Color-pak needed).
- Non-sag even in wide joints.
- Easy to mix.
- Paintable with water, oil, and rubber-base paints.
- Jet fuel resistant.
- Cold weather booster for initial tack (see reverse side for data).
- Shore A hardness can be increased by using “TG” additive. See Sikaflex-2c NS TG data sheet for specific details.

SUSTAINABILITY

- LEED® EQc 4.1
- SCAQMD, Rule 1168
- BAAQMD, Reg. 8, Rule 51

CERTIFICATES AND TEST REPORTS

- Certified to NSF/ANSI standard 61 for portable water
- 2-hour UL Fire Rated Joint System Nos. FF-S-1034, FW-S-1020, HW-S-1018, WW-S-1037.

PRODUCT INFORMATION

Packaging	5.7 L unit and 11.4 L units (1.5 and 3 US gal. units)
Colour	A wide range of architectural colors are available. Special colors available on request.
Shelf life	12 months in original, unopened containers.
Storage conditions	Store dry at 4–35 °C Condition material to 18–24 °C before using.

TECHNICAL INFORMATION

Shore A hardness	25 ± 5 (23 °C / 50 % R.H.)	(ASTM D2240)
Tensile strength	~0.62 MPa (90 psi) (23 °C / 50 % R.H.)	(ASTM D412)
Tensile strain at break	~300 % (23 °C / 50 % R.H.)	(ASTM D412)
Tear strength	~8.036 kg/cm (23 °C / 50 % R.H.)	(ASTM D624)
Chemical resistance	Good resistance to water, diluted acids, diluted alkalines, and residential sewage. Consult Technical Service for specific data.	
Resistance to weathering	Excellent	
Service temperature	-40 °C to 75 °C	
Adhesion in peel	Peel Strength (concrete) > 2.63 N/mm (> 15 lb/in) Adhesion loss 0% (23 °C / 50 % R.H.)	(FS TT-S-00227E)
Tensile stress at specified elongation	~0.48 MPa (70 psi) at 100 % (23 °C / 50 % R.H.)	(ASTM D412)

APPLICATION INFORMATION

Consumption

Joint length [m] per 1000 ml of product	Joint width (mm)	Joint depth (mm)
27	6	6
16	10	6
12	13	6
5	20	10
3	25	12
2	30	15
1.2	40	20

Ambient air temperature

4 °C to 38 °C
Sealant should be installed when joint is at mid-range of its anticipated movement.

Substrate temperature

4 °C to 38 °C
Sealant should be installed when joint is at mid-range of its anticipated movement.

Pot Life

Sikaflex®-2c NS EZ Mix Working Time (hours)

	23 °C	38 °C	4 °C
Sikaflex-2c NS	4–6	3	6
w/ 1 booster	2	1	2–3
w/ 2 boosters	1	<1	1.5

Curing time	~3 days	(ASTM C679)
Tack free time	~8-10 hours	(ASTM C679)

BASIS OF PRODUCT DATA

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

IMPORTANT CONSIDERATIONS

- The ultimate performance of Sikaflex®-2c NS EZ Mix, depends on good joint design and proper application.
- Minimum depth in working joint is 6 mm.
- Maximum expansion and contraction should not exceed 50% of average joint width.
- When used in areas with heavy traffic either recess joint or use TG (Traffic Grade) Additive to increase durability.
- Do not cure in the presence of curing silicones.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Allow 3 day cure before subjecting sealant to total water immersion. Primer is required if sealant will be subjected to total water immersion.
- Avoid exposure to high levels of chlorine. (Maximum level is 5 ppm).
- Do not apply when moisture vapor transmission exists since this can cause bubbling within the sealant.
- Avoid over-mixing sealant.
- White color tends to yellow slightly when exposed to ultraviolet rays.
- Light colors can yellow if exposed to direct gas fired heating elements.
- When overcoating, an on-site test is recommended to determine actual compatibility.
- Rigid paints, coatings or primers will crack when placed over elastomeric sealants experiencing expansion or contraction
- Do not use in contact with bituminous/asphaltic materials.

ECOLOGY, HEALTH AND 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

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. Consult Sika Technical Service. 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® Primer-429 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 Smixing paddle.* Mix for 3–5 minutes to achieve a uniform color and consistency. Scrape down sides of pail periodically. Avoid entrapment of air during mixing. When mixing in cold weather (<10 °C), 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 12 to 20 mm 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 2–3 minutes until the sealant is well blended. Color-pak must be used with tint base. For pre-pigmented Limestone base, just mix with low speed drill and Sikaflex paddle (no Color-pak needed).

APPLICATION METHOD / TOOLS

Recommended application temperatures 5–38 °C. Preconditioning units to 18–24 °C 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.

Tooling and Finishing

Tool sealant to ensure full contact with joint walls and remove air entrapment. Joint dimension should allow for 6 mm minimum and 12 mm maximum thickness for sealant. Proper design is 2:1 width to depth ratio. To accelerate the cure of Sikaflex®-2c NS EZ Mix in cold weather temperatures, add Sikaflex-2c booster.

Removal

Uncured material can be removed with xylene. Strictly follow solvent manufacturer’s warnings and instructions for use. Cured material can only be removed mechanically. For spillage, collect, absorb, and dispose of in accordance with current, applicable local, state, and federal regulations.

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 written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. 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.

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