BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-2c NS Arctic

Two-component, non-sag, polyurethane elastomeric sealant for arctic weather applications

PRODUCT DESCRIPTION

Sikaflex®-2c NS Arctic is a 2-component, premium-grade, polyurethane based, elastomeric sealant formulated for cold weather applications. It is principally a chemical cure in a non-sag consistency. Available in a wide range of architectural colors with convenient color paks. Meets ASTM C-920, Type M, Grade NS, Class 25, use T, NT, M, G, A, O and Federal Specification TT-S-00227E, Type II, Class A. Meets CAN/CGSB 19.24 - M90.

USES

- Intended for use in all properly designed working joints with a minimum depth of 1/4 inch.
- Ideal for vertical and horizontal applications.
- Adheres to most substrates commonly found in construction.
- Mixable and placeable at temperatures as low as 15 F
- Submerged environments, such as canal and reservoir joints.
- An effective sealant for use in Exterior Insulation Finish Systems (EIFS).

CHARACTERISTICS / ADVANTAGES

- Easy to mix, gun, tool down to 15F
- At extreme cold temperatures the material will continue to be workable, gunable and toolable
- Chemical cure allows the sealant to placed in greater depths for non-moving joints/cracks
- High elasticity with a tough, durable, flexible consistency
- Exceptional adhesion to most substrates without priming
- Exceptional cut and tear resistance
- Available in 35 standard architectural colors
- Color uniformity via Color-pak system
- Capable of +/- 50 % Movement
- Non-sag even in wide joints
- Paintable with water, oil, and rubber based paints
- Jet fuel resistant

PRODUCT INFORMATION

Packaging	1.5 gal. unit.
Shelf Life	One year in origonal, unopened containers.
Storage Conditions	Store dry at 15 °F (-9.4 °C) to 85 °F (35 °C). Condition material to 15 °F (-9.4 °C) to 50 °F (10 °C) before using.
Color	Available in a wide range of architectural colors are available. Special colors available on request.

TECHNICAL INFORMATION

Shore A Hardness	**73 °F (23 °C)** 14	
Tensile Strength	**73 °F (23 °C)** 73 psi	(ASTM D-412)
Elongation at Break	**73 °F (23 °C)** 540 % **Extension at Break** **73 °F (23 °C)** 640 % *100 % E-Modulus* **73 °F (23 °C)** 15 %	(ASTM D-412) (ASTM C-1135) (-)
Elongation at maximum tensile stress	**73 °F (23 °C)** 600 %	(ASTM C-1135)
Tensile Adhesion Strength	**73 °F (23 °C)** 73 psi	(ASTM C-1135)
Tear Strength	**73 °F (23 °C)** 23 lbf/in *Tear Strain at Max. Stress* **73 °F (23 °C)** 570 psi	(ASTM D-624) (-)
Service Temperature	-40º to 170º F (-40º- 75º C)	
Chemical Resistance	Good resistance to water, diluted acids, diluted alka lines, and residential sewage. Consult Technical Service at 1-800-933-SIKA for specific data.	
Resistance to Weathering	Excellent	

APPLICATION INFORMATION

Coverage

1 gallon: Yield in Linear feet

Width/Depth	1/4"	3/8"	1/2"
1/4"	307.9		
3/8"	205.3	136.8	
1/2"	153.9	102.6	77.0
3/4"	102.6	68.4	51.3
1"			38.5
1.25"			30.8
1.5"			25.7

Ambient Air Temperature	15 °F (-9.4 °C) to 50 °F (10 °C)	
Substrate Temperature	15 °F (-9.4 °C) to 50 °F (10 °C)	
Pot Life	**15 °F (-10 °C)** 5 hours	**73 °F (23 °C)** 1 hours

Cure Time	15 °F (-10 °C)	73 °F (23 °C)
	6 to 8 days	3 to 4 days

Tack Free Time	15 °F (-10 °C)	73 °F (23 °C)
	8 hours	1 hours

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

LIMITATIONS

- The ultimate performance of Sikaflex®-2c NS Arctic depends on good joint design and proper application.
- Minimum depth in working joint is 1/4 in.
- Maximum expansion and contraction should not exceed 50 % of average joint width.
- Do not use with Sikaflex 2c NS TG (Traffic Grade) Additive.
- Do not cure in the presence of curing silicones.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Allow 7 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.

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.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

All joint-wall surfaces must be clean, dry, sound, and frost-free. Use mechanical means (i.e. sandblasting, surface grinding) to remove oils, grease, curing compound residues, and any other foreign matter from joint walls that might prevent bond. Bond breaker tape or backer rod must be used in the bottom of the joint to prevent three sided adhesion.
Priming: Priming is typically not necessary. Most substrates only require a primer if sealant will be subject to water immersion after cure. Test questionable substrates to determine if priming is needed. Consult Sikaflex Primer Technical Data Sheet for additional information or Technical Service at 800-933-7452 or tslyn@us.sika.com (USA)
Note: Most Exterior Insulation Finish Systems (EIFS) manufacturers recommend the use of a primer. When EIFS manufacturer specifies a primer Sikaflex 429 primer is recommended.

MIXING

Pour entire contents of Component 'B' into pail of component 'A'. Add entire contents of Color Pak. Mix with a slow speed drill (400–600 rpm) and Sikaflex sealant mixing paddle (or other sealant paddle with rounded edges). Mix for 3–5 minutes to achieve a uniform color and consistency. Scrape down the side periodically to ensure all of the material is mixed. Avoid over-mixing and entrapment of air when mixing. Color pak must be used with tint base.

APPLICATION METHOD / TOOLS

Recommended application temperatures: 15–50°F. Move preconditioned units to work areas just prior to application. 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 to ensure full contact with joint walls and remove air entrapment. Also, avoid overlapping sealant since this also entraps air. Tool sealant to ensure full contact with joint walls and remove air entrapment. Joint dimension should allow for 1/4 inch minimum and 1/2 maximum thickness for sealant. Proper design 2:1 width to depth ratio.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- **KEEP CONTAINER TIGHTLY CLOSED**
- **KEEP OUT OF REACH OF CHILDREN**
- **NOT FOR INTERNAL CONSUMPTION**
- **FOR INDUSTRIAL USE ONLY**
- **FOR PROFESSIONAL USE ONLY**

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Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com