

PRODUCT DATA SHEET

Sikaflex[®]-2c SL

Two-component, self-leveling, polyurethane elastomeric sealant

DESCRIPTION

Sikaflex[®]-2c SL is a 2-component, premium-grade, polyurethane-based, elastomeric sealant. It is principally a chemical cure in a self-leveling consistency.

USES

- Intended for use in all properly designed working joints with a minimum depth of 6 mm.
- Ideal for horizontal applications.
- Placeable at temperatures as low as 5 °C.
- Adheres to most substrates commonly found in construction.
- Submerged conditions, such as canal and reservoir joints.

FEATURES

- True self-leveling properties.
- Capable of ± 25 % joint movement.
- Chemical cure allows the sealant to be placed in non-moving 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).
- Self-leveling consistency, easy to apply in horizontal joints.
- Easy to mix.
- Paintable with water, oil, and rubber-base paints.
- Jet fuel resistant.

CERTIFICATES AND TEST REPORTS

- ASTM C920, Type M, Grade P, Class 25, use T, NT, M, G, A, O, I.
- Federal Specification TT-S-00227E, Type 1, Class A.

PRODUCT INFORMATION

Packaging	5.7 L unit and 11.4 L units (1.5 and 3 US gal. units) Color-pak is purchased separately. Limestone Gray color available pre-pigmented.
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 5–35 °C Condition material to 18–24 °C before using.

TECHNICAL INFORMATION

Shore A hardness	40 ± 5 (21 days at 23 °C and 50 % R.H.)	(ASTM D2240)
Tensile strength	~1.2 MPa (175 psi) (21 days at 23 °C and 50 % R.H.)	(ASTM D412)
Tensile strain at break	~650 % (21 days at 23 °C and 50 % R.H.)	(ASTM D412)
Tear strength	~17.5 N/mm (23 °C and 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) ~133.4 N (~30 lbs.) (23 °C and 50 % R.H.)	Adhesion loss 0 % (FS TT-S-00227E)
Tensile stress at specified elongation	0.68 MPa (100 psi) at 100 % (21 days at 23 °C and 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.		
Curing time	Tack-free Time	6–8 hours	(ASTM C679)
	Final Cure	3 days	
Application time	4h (23 °C and 50 % R.H.)		(FS TT-S-00227E)

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 SL, 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.
- 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.
- The minimum depth of sealant in horizontal joints subject to traffic is 12 mm.
- Do not tool with detergent or soap solution.

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

Joint wall surfaces must be clean, sound, and frost-free. Joint walls must be free of oils, grease, curing compound residues, and any other foreign matter that might prevent bond. Ideally this should be accomplished by mechanical means. A roughened surface will also enhance bond. Bond breaker tape or backer rod must be used in bottom of joint to prevent bond.

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 Technical Service or Sikaflex Primer Technical Data Sheet for additional information on priming.

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 mixing 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. Color-pak must be used with tint base. Note: When mixing 11.4 L (3 gal.) unit, two containers of Component B and two color-paks must be used. *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. Pre-conditioning 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 SL should be applied into joints when joint slot is at mid-point of its designed expansion and contraction. To place, pour or extrude the SL grade in one direction and allow it to flow and level as necessary. If extruding, load mixed sealant directly into bulk gun or use 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 as necessary. Joint dimension should allow for 6 mm minimum and 12 mm maximum thickness for sealant. Proper design is 2:1 width to depth ratio.

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.

Sika Gulf B.S.C. (c)

Tel: +973 177 38188
Email: info@bh.sika.com
Sika Kuwait Cons. Mat. & Paints Co WLL
Tel: +965 22 282 296
Email: sika.kuwait@kw.sika.com
Web: gcc.sika.com

Sika UAE LLC

Sika MB Construction Chemicals LLC
Sika International Chemicals LLC
Tel: +971 4 439 8200
Email: info@ae.sika.com
Web: gcc.sika.com

Sika Saudi Arabia Limited

Sika Construction Chemicals for
Manufacturing LLC
Riyadh / Jeddah / Dammam / Rabigh
Tel: +966 9200 22167
Email: info@sa.sika.com
Web: gcc.sika.com

Sika LLC - Oman

Sika MB LLC
Tel. +968 22 826 500
Email: info@om.sika.com
Web: gcc.sika.com



ISO 9001, 14001, 45001 – SGS:
- Sika MB LLC
- Sika International Chemicals LLC
- Sika Gulf B.S.C. (c)
- Sika UAE LLC
- Sika Saudi Arabia Limited
- Sika MB Construction Chemicals LLC
- Sika Construction Chemicals for Manufacturing LLC
- Sika MB LLC

All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.



Product Data Sheet

Sikaflex®-2c SL

May 2025, Version 01.02
020515040000000001

