

PRODUCT DATA SHEET

Sikaflex® SL 2

(formerly MSeal SL 2)

MULTI-COMPONENT SELF-LEVELING POLYURETHANE SEALANT

PRODUCT DESCRIPTION

Sikaflex® SL 2 is a multi-component, self-leveling, elastomeric polyurethane sealant that is mixed and poured in place. When cured, it forms a tough, resilient joint seal that resists penetration and abrasion and remains flexible when exposed to weather and aging.

USES

- Horizontal
- Interior and exterior
- Expansion joints
- Control joints
- Pavers
- Plaza decks
- Industrial floors
- Driveways/garages
- Sidewalks
- Decks
- Parking structures
- Pitch pans

SUBSTRATES

- Concrete
- Metal

CHARACTERISTICS / ADVANTAGES

- Abrasion-resistant to help handle pedestrian and vehicular traffic
- Joint movement capability $\pm 25\%$ provides excellent flexibility for keeping moving joints weathertight
- Weather resistant, producing long-lasting weathertight seals
- Easy to gun and tool, speeding up application and making neater joints
- No primer is required for most construction materials, lowering installation costs
- The wide temperature-application range makes Sikaflex® SL 2 suitable for all climates
- Suitable for water immersion with documented performance in wet areas
- Chemical cure allows for faster turnaround time
- Bulk packaging results in less waste
- Long pot life offers extended working time
- Formulated to withstand pedestrian and vehicular traffic

APPROVALS / STANDARDS

- ASTM C 920, Type M, Grade P, Class 25, Use T, NT, M, A, O*, and I
- Federal Specification TT-S-00227E, Type I, Class A
- Canadian Specification CAN/CGSB 19.24-M90, Classification MCG-1-40-B-L, No. 81031
- CFI accepted

*Refer to substrates in Uses

PRODUCT INFORMATION

Chemical Base	Sikaflex® SL 2 is a multi-component polyurethane that cures by chemical reaction after proper mixing.
Packaging	<ul style="list-style-type: none"> 1.5 gallon units in 2 gallon (5.67 L) pails 3 gallon unit in 3.5 gallon (11.3 L) pails
Color	<p>Limestone (Pre-pigmented) and Tint Base</p> <p>Tint Base: 40 standard, stocked colors are available. Refer to the Popular Palette for Sealants and Waterproofing.</p> <p>Custom matching can be done upon request.</p>
Shelf Life	15 months
Storage Conditions	Store in unopened containers in cool, clean, dry area out of direct sunlight. Elevated temperatures will shorten shelf life.

TECHNICAL INFORMATION

Shore Hardness	Grade	Shore A	(ASTM C 661)
	Self Leveling (SLV)	35 ± 5	
	Slope Grade (SLG)	30 ± 5	
Tensile Strength	Grade	Tensile Strength	(ASTM D 412)
	Self Leveling (SLV)	170 psi (0.9 MPa)	
	Slope Grade (SLG)	140 psi (1.0 MPa)	
Elongation	Grade	Elongation	(ASTM D 412)
	Self Leveling (SLV)	600%	
	Slope Grade (SLG)	225%	
Shrinkage	None		
Tear Strength	± 42 lbs/in		(ASTM C 624)
Movement Capability	± 25		(ASTM C 719)
Low Temperature Bend	Passes	(Low-temperature flexibility -15°F (-26°C), ASTM C 793)	
Thermal Resistance	None	(Cracking and chalking after heat aging, ASTM C 792)	
Resistance to Weathering	Xenon arc; 250 hours	Passes	(ASTM C 793)
	Xenon arc; 2,000 hours	No surface cracking	(ASTM G 26)
Service Temperature	-40° to 180°F (-40° to 82°C)		
Joint Design	Joint Width and Sealant Depth		
	Joint Width, IN (MM)	Sealant Depth At midpoint, IN (MM)	
	¼–½ (6–13)	¼ (6)	
	½–¾ (13–19)	¼–3/8 (6–10)	
	¾–1 (19–25)	3/8–½ (10–13)	
	1–2 (25–50)	½ (13)	
Adhesion in peel	Passes		(ASTM C 794, On concrete)
Color	No visible stain		(ASTM C 510)

APPLICATION INFORMATION

Coverage

Linear Feet per Gallon

Width/Depth (In.)	1/4	3/8	1/2
1/4	308	-	-
3/8	205	-	-
1/2	154	-	-
5/8	122	82	-
3/4	-	68	51
7/8	-	58	44
1	-	51	38
3/2	-	-	26
2	-	-	19

Meters per Liter

Width/Depth (mm)	6	10	13
6	24.8		
10	16.5		
13	12.4		
16	9.8	6.6	
19		5.5	4.1
22		4.7	3.5
25		4.1	3.0
38			2.2
50			1.5

Pot Life	4 hrs.	73° F (23° C) and 50% R.H.
Cure Time	3 days	73° F (23° C) and 50% R.H.
Tack Free Time	< 24 hrs	(ASTM C 679)
Flowability	Grade Self Leveling (SLV) Slope Grade (SLG)	Rheological (flow) Self-leveling Semi Self-Leveling (ASTM C 639 at 40°F (4°C))

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.

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

- Do not allow Sikaflex® SL 2 sealants to come into contact with alcohol-based materials or solvents.
- Do not apply polyurethane sealants in the vicinity of

- uncured silicone sealants or uncured Sikaflex® HY 150.
- When Sikaflex® SL 2 is to be used in areas subject to continuous water immersion, cure for 14 days at 70 °F (23 °C). Allow longer cure time at lower temperatures. Always use Sika® Primer-429.
- Do not use it in swimming pools or other submerged conditions where the sealant will be exposed to strong oxidizers. Avoid submerged conditions where water temperatures will exceed 120 °F (58 °C).
- For slopes up to 15% use Sikaflex® SL 2 Slope Grade. For slopes over 15% use Sikaflex® NP 2 sealant.
- Backer rods, joint fillers, or bond breakers must be tight to the sides of the joint to prevent loss of sealant through the bottom.
- For joints subject to puncture by high heels or umbrella points, a stiffer or higher-density backer material is required. Cork or rigid non-impregnated cane-fiber joint fillers are suitable. Separate materials from the sealant by a non-adhering bond breaker (polyethylene tape).
- Do not use other caulks or sand as a bottom bed in a joint.
- Do not install when rain is expected before the sealant reaches the initial cure (about 12 hours).
- Units of Sikaflex® SL 2 are premeasured; do not use partial units.
- Sikaflex® SL 2 may yellow in the presence of unvented artificial heat; this is a surface phenomenon that does not affect sealant performance.
- Use only Sikaflex®-900 color packs intended for use with Sikaflex® SL 2.
- Proper application is the responsibility of the user. Field visits by Sika personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the job site.

SUBSTRATE PREPARATION

Joints must be clean and dry. Joint surfaces must be structurally sound, fully cured, and free of all loose aggregate, paint, oil, grease, asphalt, wax, mastic compounds, waterproofing compounds, form-release materials, curing compounds, or any other contaminants.

New Concrete

Remove all loose material from joints by wire brushing. Sandblast surfaces in contact with form-release agents. Fresh concrete must be fully cured. Laitance must be removed by abrading.

Old Concrete

For previously sealed joints, remove all old material by mechanical means. If joint surfaces have absorbed oils, remove sufficient concrete to ensure a clean surface.

Priming

1. For most applications, priming is not required; joints subject to periodic water immersion, however, must be primed with Sika® Primer-429. On surfaces other than concrete, conduct a test application to verify adhesion.
2. Apply primer in a thin, uniform film. Avoid buildup of excess primer.
3. Avoid applying primer beyond joint faces. To minimize the contamination of adjacent surfaces, apply masking tape before priming and remove before the sealant has begun to thicken and set.
4. Allow approximately 15 – 30 minutes drying time before applying sealant (primer should be tack-free). Priming and sealing must be done on the same day.

MIXING

1. Sikaflex® SL 2 is a multi-component system with a configuration of Part A, Part B, and a color pack. Pre-pigmented units do not use a color pack.
2. Transfer the entire contents of Sikaflex®-900 pigment color pack into the Part A. Use a spatula or knife to remove all the pigment from the container. Continue mixing with a slow-speed drill and slotted paddle until the color is uniform. During the process, scrape the sides and bottom of the mixing container several times to obtain a complete mix.
3. Transfer the entire content of Part B to pre-mixed Part A container using a spatula or margin trowel.
4. Part B must be mixed thoroughly with pre-mixed Part A. Scrape the sides of the container to ensure complete mixing of mixed Parts A and B. With a slow-speed drill and a sealant mixing paddle, mix for 4–6 minutes. Keep the paddle blade below the surface of the sealant to avoid whipping air into the sealant.

NOTE:

- 1.5 gal unit kit use **one** Sikaflex®-900 pigment color pack
- 3.0 gal unit kit use **two** Sikaflex®-900 pigment color packs

APPLICATION METHOD / TOOLS

1. The product may be used in sealant joints designed in accordance with SWR Institute's Sealants - The Professional's Guide.
2. In optimal conditions, the depth of the sealant should be ½ the width of the joint. The sealant joint depth (measured at the center) should always fall between the maximum depth of ½" and the minimum depth of ¼". Refer to Joint Design.
3. In deep joints, the sealant depth must be controlled by a closed-cell backer rod or soft backer rod. Where the joint depth does not permit the use of a backer rod, a bond breaker (polyethylene strip) must be used to prevent three-point bonding.
4. To maintain the recommended sealant depth, install the backer rod by compressing and rolling it into the joint channel without stretching it lengthwise. Closed cell backer rod should be about 1/8" (3 mm) larger in diameter than the width of the joint to allow for compression. The soft backer rod should be approximately 25% larger in diameter than the joint width. The sealant does not adhere to it, and no separate bond breaker is required. Do not prime or puncture the backer rod.

APPLICATION

1. All caulking and sealing should be performed when temperatures are above 40 °F (4 °C); any moisture or frost on surfaces will adversely affect adhesion.
2. Fill joints from the bottom; avoid bridging the joint, which may form air voids.
3. For large joints, the self-leveling grade may be poured directly from the can.
4. For smaller joints and all slope-grade applications, fill the joint by flowing the sealant from a bulk-loading gun.
5. Light tooling of the slope-grade sealant is recommended to smooth out ripples. On sloped surfaces, tool from the lowest point to the highest. Do not use soap or solvent.

Curing

Cure time will vary with humidity and temperature. Initial cure is within 24 hours and complete cure takes approximately 7 days. Allow 14-day cure at 70 °F (23 °C) before water immersion. Cure rates are dependent on temperature and humidity. Protect joint from dirt and traffic until cured.

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



Product Data Sheet
Sikaflex® SL 2
April 2025, Version 02.02
02051500000002020

CLEANING OF TOOLS

1. Immediately after use and before the sealant has cured, clean equipment with Sikaflex®-990 or xylene.
2. The cured sealant may be removed by cutting with a sharp-edged tool. Remove thin films by abrading.

LEGAL DISCLAIMER

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

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 calling SIKA's Technical Service Department at 1-800-933-7452. 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.

SikaflexSL2-en-US-(04-2025)-2-2.pdf

