

PRODUCT DATA SHEET

Sikasil® SL 189

(formerly MSeal SL 189)

Ultra-low modulus silicone sealant for concrete and asphalt substrates

DESCRIPTION

Sikasil® SL 189 is a high performance, one-part, moisture curing silicone construction sealant. The Product offers ultra-low modulus, fuel and UV resistant, elastomeric seal. The ultra-low modulus minimises the strain on the asphaltic joint face, which is necessary due to the low tensile strength of asphaltic paving materials.

USES

Sikasil® SL 189 is used for sealing:

- Movement or expansion joints
- Saw-cut joints for crack control
- Shaped and spalled joints
- Can lights and electrical cables in airport runway lighting

- Connection joints between concrete and asphalt
- Saw-cut openings used to encapsulate and seal sensitised wiring loops for control of traffic signals, traffic counters, parking lot gates, ticket dispensers, and other similar equipment.

Please note:

- The Product is not suitable for permanent water immersion.
- Do not use in a totally confined space, because the sealant requires atmospheric moisture to cure.

FEATURES

- Ready for use
- Low stress on substrate due to the low modulus of the sealant
- No primer required
- Very good durability
- Adapts to joint width and alignment irregularities
- Wide service temperature range

PRODUCT INFORMATION

Composition	Silicone	
Packaging	600 mL sausage and 857 mL cartridge. Bulk pack on request.	
Colour	Dark grey	
Shelf life	12 months from date of production	
Storage conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +25 °C. Always refer to the packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.	
Density	~1.3 kg/l	(ISO 1183-1)
Product declaration	ASTM D5893/D5893M-16 ASTM C920-18	Type SL Type S, Grade P, Class 100/50, Use T

TECHNICAL INFORMATION

Shore hardness	Shore 00	Cured 25 days at +23 °C and 50 % R.H.	~40	(EN ISO 868)
Secant tensile modulus	Cured at (50 ± 5) % R.H. Measured at 150% elongation at +23 °C		0.05 N/mm ²	(ASTM D412; ISO 8339)
Shrinkage	Loss of volume	< 2 %		(EN ISO 10563)
Elastic recovery	~75 %			(EN ISO 7389)
Movement capability	100/50			(ASTM C719)
Service temperature	Maximum	+145 °C		
	Minimum	-30 °C		
Elongation at break	750 %			(ISO 37)

APPLICATION INFORMATION

Consumption	JOINT LENGTH PER 600 ML FOIL PACK					
	Joint depth	Joint width: 4 mm	Joint width: 6 mm	Joint width: 8 mm	Joint width: 12 mm	Joint width: 20 mm
	6 mm	25 m	16.6 m	12.5 m	8.3 m	5 m
	8 mm	-	12.5 m	9.3 m	6.5 m	3.7 m
	10 mm	-	-	7.5 m	5 m	3 m
	12 mm	-	-	-	4.1 m	2.5 m
	JOINT LENGTH PER 857 ML CARTRIDGE					
	Joint depth	Joint width: 4 mm	Joint width: 6 mm	Joint width: 8 mm	Joint width: 12 mm	Joint width: 20 mm
	6 mm	37.5 m	23.8 m	17.8 m	11.9 m	7.1 m
	8 mm	-	17.8 m	13.3 m	8.9 m	5.3 m
	10 mm	-	-	10.7 m	7.1 m	4.2 m
	12 mm	-	-	-	5.9 m	3.5 m
Backing material	Use closed cell, polyethylene foam backing rod.					
Sag flow	Self-leveling, can be used on slopes ≤ 3%					
Material temperature	Maximum					+40 °C
	Minimum					+5 °C
Ambient air temperature	Maximum					+40 °C
	Minimum					+5 °C
Dew point	The substrate temperature must be at least +3 °C above dew point to reduce the risk of condensation decreasing adhesion.					
Substrate temperature	Maximum					+40 °C
	Minimum					+5 °C
Curing time	< 21 days				(CQP049-2)	
Skinning time	At +23 °C and 50 % r.h.			60 min		
Tack free time	~5 hours				(EN 14187-2)	

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.

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

The substrate must be sound, clean, dry and free of contaminants such as dirt, oil, grease, cement laitance, sealant residues and poorly bonded coatings which could affect adhesion of the primer and sealant. The substrate must be of sufficient strength to withstand the stress induced by the sealant during movement.

1. Use techniques such as wire brushing, grinding, grit blasting or other suitable mechanical methods to remove all weak substrate material.
2. Repair all damaged joint edges with suitable Sika repair products.
3. Remove dust, loose and friable material from all surfaces before applying the sealant.

Never apply the Product to damp or wet concrete, to asphalt, or during rain.

APPLICATION

IMPORTANT

Strictly follow installation procedures

Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

Ambient temperature

Note: In colder temperatures, reactions happen slower, leading to longer open and curing times. In warmer temperatures, reactions occur faster, resulting in shorter open and curing times.

To guarantee complete curing, maintain material and structure temperatures above the minimum limit at any location and any point during the curing process.

1. Install the cartridge into a manual or air-operated gun.
2. Fill from the bottom up to within 3 mm of the roadway.
3. Where required, strike off just below surface level and remove any excess material.

CLEANING OF EQUIPMENT

Clean all tools and application equipment immediately after use with Sika® Remover-208 or Sika® Cleaning Wipes-100. Once cured, hardened material can only be removed 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 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)
ISO 9001, 14001 – SGS
Sika Saudi Arabia Limited
ISO 9001, 14001 – TÜV
Sika MB Construction Chemicals LLC
Sika Construction Chemicals for Manufacturing LLC
ISO 9001 – LMS
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

Sikasil® SL 189

December 2024, Version 02.03

02051500000002023

