

PRODUCT DATA SHEET

Sikaflex® Max Hybrid 1

MULTI-PURPOSE ADHESIVE/SEALANT BASED ON HYBRID POLYMER TECHNOLOGY

PRODUCT DESCRIPTION

Sikaflex® Max Hybrid 1 is a one-component, high-performance, multi-purpose, all-weather hybrid polymer adhesive/sealant. Its advanced technology offers maximum flexibility and superior adhesion for most construction material substrates.

WHERE TO USE

Bonds and seals most construction material substrates including concrete, masonry, aluminum, metals, ceramics, porcelain, granite, marble, PVC, glass, and wood.

Suitable for a wide range of applications, such as windows and doors frames, concrete joints, metal building construction, roofing and gutter, HVAC, general sealing and waterproofing.

CHARACTERISTICS / ADVANTAGES

- Resists to extreme temperatures from -40 °C (-40 °F) to 90 °C (194 °F)
- Very good UV resistance
- Excellent resistance to aging and weathering
- Excellent adhesion – bonds to most construction materials without a primer
- Flexible and easy-to-apply
- Bubble-free, even in wet and humid conditions
- No shrinkage, non-sag, no surface tackiness
- Does not contain isocyanate
- Low VOC-content
- Non-staining
- Paintable with water-based paints

ENVIRONMENTAL INFORMATION

Conformity with LEED v4.1 EQc Low-Emitting Materials

PRODUCT INFORMATION

Composition / Manufacturing	Polyurethane and Silicone based	
Packaging	290 mL (9.8 US fl. oz) cartridge, 12 cartridges per box	
Colour	Black, Dark Bronze	
Shelf Life	12 months in original unopened packaging	
Storage Conditions	Store in original, unopened and undamaged packaging in dry conditions at temperatures between 5 °C (41 °F) and 25 °C (77 °F).	
Density	1.60 g/l (0.013 lb/gal)	
Shore A Hardness	40 ± 5	(ISO 868)
Tensile Strength	1.5 - 2.0 MPa (218 - 290 psi)	(DIN 53504)

Shrinkage	< 3 %					(ISO 10563)
Temperature Resistance	-40 °C (-40 °F) to 90 °C (194 °F)					
Joint Design	The minimum joint width and depth are 5 mm (3/16 in). The typical joint dimension follow a width-to-depth ratio of 2:1					
Elongation at break	≥ 300 %					(DIN 53504)
Yield	Bonding:					
	Yield per cartridge			Dimension		
	~118 spots			Diameter = 25 mm (1 in) Thickness = 5 mm (3/16 in)		
	~14.8 m (48.6 ft) bead			Diameter = 5 mm (3/16 in) (Cylindrical)		
	Sealing, l.m. (l.ft) per cartridge:					
		Depth mm (in)				
	Width mm (in)	6 (1/4)	13 (1/2)	19 (3/4)	25 (1)	32 (1 1/4)
	6 (1/4)	8.1 (26.5)	-	-	-	-
	13 (1/2)	3.7 (12.1)	1.7 (5.6)	-	-	-
	19 (3/4)	2.5 (8.2)	1.2 (3.9)	0.8 (2.6)	-	-
	25 (1)	1.9 (6.2)	0.9 (3.0)	0.6 (2.0)	0.5 (1.6)	-
	32 (1 1/4)	1.5 (4.9)	0.7 (2.3)	0.5 (1.6)	0.4 (1.3)	0.3 (1.0)
	Consumption depends on the roughness and absorbency of the substrate. These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.					
Backing Material	To be used with Sikaseal®-414 Backer Rod					
Sagging	0 mm (0 in)					(ISO 7390)
Ambient Air Temperature	5 °C (41 °F) to 40 °C (104 °F)					
Curing Rate	Min. 2.5 mm/24h (23 °C (73 °F) and 50 % R.H.)					
Skinning time	12 - 25 min (23 °C (73 °F) and 50 % R.H.)					
Curing Conditions	Cure at room temperature with moisture					

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

WHERE TO USE

- Avoid application below 5 °C (41 °F) and above 40 °C (104 °F)
- Not suitable for food contact applications
- Should not be used in areas where it cannot cure due to insufficient atmospheric moisture.
- Sikaflex® Max Hybrid 1 can be overpainted with most water-based paints. However, compatibility must be tested first. The best results are obtained when the adhesive/sealant is fully cured, depending on the environmental conditions and adhesive layer thickness.
- Colour variations may occur due to the exposure in service to chemicals, high temperatures and/or UV radiation. This effect is aesthetic and does not influence the technical performance or durability of the product.
- It is recommended to contact Sika® Technical Services for applications on substrates and/or conditions not stated on the technical data sheet.

ENVIRONMENT, HEALTH & 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

Glass	Degrease with alcohol or MEK
Aluminium, light alloys and stainless steel	Degrease with alcohol or MEK
Other Metals	Lightly abrade then degrease as above
Wood	Lightly abrade surface then remove dust
Plastics	Degrease using an agent recommended by plastics manufacturer
Concrete and other alkaline Surfaces	The substrate must be sound, clean, dry and free of all contaminants such as dirt, oil, grease, cement laitance, old sealants and poorly bonded paint coatings which could affect adhesion. The substrate must be of sufficient strength to resist with the stresses induced by the adhesive/sealant during movement. Use removal techniques such as wire brushing, grinding, sanding, or other suitable mechanical methods. All dust, loose and friable material must be completely removed from all surfaces before application.

curing time. Immediately remove any uncured adhesive from the surface. Final strength is achieved after complete curing of Sikaflex® Max Hybrid 1, depending on the environmental conditions and adhesive layer thickness.

APPLICATION METHOD / TOOLS

Bonding Procedure

- **Application:** After preparing the surface, insert the cartridge into the sealant gun and fit the nozzle. Apply the adhesive in beads, strips or spots a few centimeters apart. Press components into place by hand before skinning occurs, repositioning is possible for a few minutes. If necessary, use temporary adhesive tapes, wedges, or supports to hold the assembled components together during the initial

Sealing Procedure

- **Masking:** It is recommended to use masking tape where precise joint lines are required. Remove the tape within the skin time after finishing.
- **Joint Backing:** After the required substrate preparation, insert Sikaseal®-414 Backer Rod to the required depth.
- **Application:** Prepare the cartridge tip either before or after placing it into the sealant gun, then attach the nozzle. Apply Sikaflex® Max Hybrid 1 into the joint ensuring that it comes into full contact with the sides of the joint and avoiding air entrapment.
- **Finishing:** As soon as possible after application, sealant must be firmly tooled against the joint sides to ensure adequate compaction, adhesion and a smooth finish. Do not use tooling products containing solvents.

CLEAN UP

Clean all tools and equipment with a paint thinner / solvent. Once hardened, the product can only be removed mechanically. Wash soiled hands and skin thoroughly in hot soapy water or use Sika® Cleaning Wipes-120.

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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

Sika Canada Inc.

Head Office
601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9
1-800-933-SIKA
www.sika.ca

Other locations

Boisbriand (Quebec)
Brantford; Cambridge;
Sudbury; Toronto (Ontario)
Edmonton (Alberta)
Surrey (British Columbia)

Product Data Sheet

Sikaflex® Max Hybrid 1
September 2025, Version 01.02
020514020000243343

SikaflexMaxHybrid1-en-CA-(09-2025)-1-2.pdf

