

Sikaflex®-721 UV

One-Component Silane Terminated Polymer Sealant

Technical Product Data

Chemical base		1-C Silane terminated polymer
Color		White, Nu-White, Gray
Cure mechanism		Moisture-curing
Density (uncured)		12.9 lb/gal
VOC (EPA method 24)		< 0.5%
Application temperature	product	40°-110°F (4°-43°C)
Tack free time ¹		30 min
Open time ¹		20 min
Curing speed		(see diagram 1)
Shore A-hardness (ASTM D 2240)		32
Tensile strength (ASTM D 412)		140 psi
Elongation at break (ASTM D 412)		300%
Service temperature	permanent	-40°-190°F (-40°-88°C)
Shelf life (storage below 80°F (27°C))		6 months

¹⁾ 73°F (23°C) / 50% r.h.

Description

Sikaflex®-721UV is a one-component silane terminated polymer (STP) sealant with excellent adhesion and UV resistance. It has a six month shelf life when stored below 80F. Sikaflex®-721UV is tested and classified in accordance with ANSI/UL 723 "Test for Surface Burning Characteristics of Building Materials". Sikaflex®-721UV is manufactured in accordance with ISO 9001 / 14001 quality assurance system and the Responsible Care Program.

Product Benefits

- Excellent tooling characteristics
- Primerless adhesion to difficult substrates
- Isocyanate free
- Low VOC content
- Excellent UV resistance
- Excellent color stability

Areas of Application

Sikaflex®-721UV is suitable for making permanent elastic seals between a wide variety of materials. Suitable substrate materials are: metals, particularly aluminum (including anodized components), sheet steel (including phosphated, chromated and zinc-plated components), metal primers and paint coatings (two-part systems), ceramic materials and plastics. Seek plastic manufacturer's advice before using on plastics that are prone to stress cracking.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

Industry



Cure Mechanism

Sikaflex®-721UV is a silane-terminated polymer which cures on exposure to the air (atmospheric moisture). The chemical reaction is set in motion as soon as the adhesive is extruded or the cartridge is opened. Initially paste like in consistency, Sikaflex®-721UV cures to form a high grade elastomer.

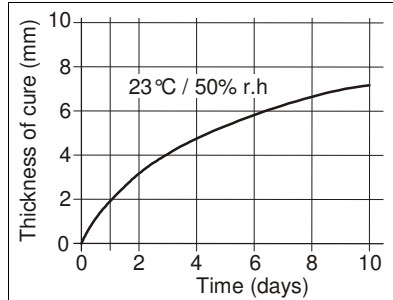


Diagram 1: Curing speed Sikaflex®-721UV

Chemical Resistance

Good resistance to water, various dilute acids and alkalis, vegetable oil, mineral oil, salt solutions, and kerosene. Not resistant to organic solvents, gasoline, paint thinner, strong acids and strong alkalis. Joint design may affect long-term durability.

The above information is offered for general guidance only. Advice on specific applications will be given on request.

Method of Application

Surface preparation

Surfaces should be clean, dry, free of oil and grease, and of sound quality. Preliminary test for optimal adhesion should be performed.

Advice on specific applications is available from the Technical Service Department of Sika Industry.

Application

Recommended application temperatures: 40°F to 110°F. For temperatures below 40°F it is recommended to condition units to approximately 70°F (21°C) until just prior to use. Make sure joint is frost-free. Cut tip to joint size. Puncture airtight seal. Install with hand or power operated gun. For best performance, Sikaflex®-721UV should be gunned into joint when joint slot is at mid-point of its designed expansion and contraction.

For advice on selecting and setting up a suitable pump system please contact the System Engineering Department of Sika Industry.

Tooling and finishing

To facilitate tooling, wet pointing tool or finger with soap solution for best results.

Removal

Uncured Sikaflex®-721UV may be removed from tools and equipment with mineral spirits or another suitable solvent. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed immediately using a suitable industrial hand cleaner and water. Do not use solvents on hands!

Overpainting

Sikaflex®-721UV can be over-painted before it becomes tack-free. The paints, and paint process must be tested for compatibility by carrying out preliminary trials. It should be understood that the hardness and film thickness of the paint may impair the elasticity of the sealant and lead to cracking of the paint film.

Limitations

Since system is moisture-cured, permit sufficient exposure to air. Do not apply over silicones or in the presence of curing silicones or curing urethanes. Avoid contact with excessive amounts of alcohols or alcohol-containing mixtures, as some temporary initial surface tackiness may result. For best

results, use opened cartridges the same day.

Warning

Irritant

Contains Silyl-terminated polyether. May cause eye, skin or respiratory irritation.

Handling, storage and cleanup

Avoid direct contact. Wear protective equipment (chemical resistant gloves/goggles/clothing) to prevent contact with skin and eyes. Use only in well ventilated areas. Open doors and windows during use. Use properly fitted NIOSH approved respirator if ventilation is poor. Remove contaminated clothing and laundry before reuse. Without direct contact, remove spilled or excess product and place in a suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

HMIS

Health	2
Flammability	1
Reactivity	0
Personal Protection	C

First Aid Measures

Inhalation - Remove to fresh air.

Eyes - Rinse for 15 minutes with tepid water. Call physician. **Skin** - Wash thoroughly with soap and tepid water. Remove contaminated clothing. **Ingestion** - Do not induce vomiting. Dilute with water. Call physician. **In all cases contact a physician immediately if symptoms persist.**

Further information available at:
www.sikaindustry.com

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Further Information

Copies of the following publications are available on request at www.sikaindustry.com:

- Material Safety Data Sheets
- Product Data Sheets

In case of emergency call:

Chemtrec: 800-424-9300
International: 703-527-3887

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

Packaging Information

Cartridge	300 ml
Unipac	300 ml

Value Basis

All technical data stated on this Product Data Sheet are based on the results of laboratory tests only. Actual measured data in the field may vary due to site specific conditions which are not known to Sika and beyond our control.

Health and Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

Limited Material Warranty

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 shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES IMPLIED OR EXPRESS SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS**

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current Product Data Sheet, product label and Material Safety Data Sheet which are available at www.sikaindustry.com. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Material Safety Data Sheet prior to product use.

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