

**BUILDING TRUST** 

### PRODUCT DATA SHFFT

# Sikaflex<sup>®</sup>-250 UC-1

Room temperature applied direct glazing adhesive

### TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base		Polyurethane
Color (CQP001-1)		Black
Cure mechanism		Moisture-curing
Density (uncured)		1.25 kg/l
Non-sag properties (CQP061-1)		Very good
Application temperature	adhesive	10 – 35 °C
	ambient	10 – 35 °C
Skin time (CQP019-1)		25 minutes <sup>A</sup>
Curing speed (CQP049-1)		See diagram 1
Shore A hardness (CQP023-1 / ISO 48-4)		68
Tensile strength (CQP036-1 / ISO 527)		10 MPa
Elongation at break (CQP036-1 / ISO 527)		340 %
E-Modulus (CQP036-1 / ISO 527)	1-10 %	6 MPa
Tensile lap-shear strength (CQP046-1 / ISO 4587)		5 MPa
Shelf life		6 months <sup>B</sup>

CQP = Corporate Quality Procedure

#### DESCRIPTION

Sikaflex®-250 UC-1 is a 1-component polyurethane direct glazing adhesive with a high initial strength, which cures on exposure to atmospheric humidity. This product is developed for direct glazing in the automotive industry. Sikaflex®-250 UC-1 is manufactured in accordance with IATF 16949:2016 quality assurance • Good working characteristics system.

## A) 23 °C / 50 % r.h.

- **PRODUCT BENEFITS**
- 1-component application
- Room temperature applied
- Primerless to paint capable
- High initial strength
- PVC- and solvent free
- Short cut-off string

#### B) stored below 25 °C in unopened container

#### AREAS OF APPLICATION

Sikaflex®-250 UC-1 is suitable for automated and manual direct glazing as well as permanent elastic bonding of components in the automotive industry. Sikaflex®-250 UC-1 bonds well to numerous substrates. Common substrates are pre-treated ceramic frits and glasses with corresponding UV protection as well as cleaned ecoated and painted surfaces. For glasses and ceramic frits, a pretreatment is mandatory. This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed ensuring

adhesion and material compatibility.

PRODUCT DATA SHEET Sikaflex®-250 UC-1 Version 02.01 (03 - 2023), en\_US 012001210188001000

#### CURE MECHANISM

Sikaflex<sup>®</sup>-250 UC-1 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is generally lower and the curing reaction proceeds somewhat slower (see diagram 1).

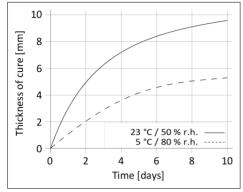


Diagram 1: Curing speed of Sikaflex®-250 UC-1

#### CHEMICAL RESISTANCE

Sikaflex®-250 UC-1 is generally resistant to fresh water, seawater, diluted acids and diluted caustic solutions; temporarily resistant to fuels, mineral oils, ethanol, vegetable and animal fats and oils; not resistant to organic acids, glycolic alcohol, concentrated mineral acids and caustic solutions or solvents.

#### METHOD OF APPLICATION

#### Surface Preparation

Surfaces must be clean, dry and free from grease, oil, dust and contaminants.

Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond. All pre-treatment steps must be confirmed by preliminary tests on original substrates considering specific conditions in the assembly process.

#### Application

Sikaflex<sup>®</sup>-250 UC-1 can be processed between 10 °C and 35 °C (ambient and adhesive) but changes in reactivity and application properties have to be considered. Consider that the viscosity will increase at low temperature. For easy application, condition the adhesive at ambient temperature prior to use. To ensure a uniform thickness of the bondline it is recommended to apply the adhesive in form of a triangular bead (see figure 1).

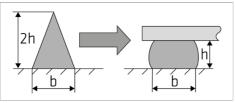


Figure 1: Recommended bead configuration

Sikaflex<sup>®</sup>-250 UC-1 is processed with a corresponding pump equipment.

The skin time is significantly shorter in hot and humid climate. Never join bonding parts if the adhesive has built a skin.

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

For transparent substrates, bond faces must be fully UV protected by suitable design or means.

#### Removal

Uncured Sikaflex<sup>®</sup>-250 UC-1 may be removed from tools and equipment with Sika<sup>®</sup> Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically.

Hands and exposed skin have to be washed immediately using hand wipes or a suitable industrial hand cleaner and water. Do not use solvents on skin.

#### FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Industry.

Copies of the following publications are available on request:

- Safety Data Sheets
- General Guideline
- Bonding and Sealing with 1-component Sikaflex®

#### PACKAGING INFORMATION

Cartridge	300 ml
Drum	53 gallon

#### **BASIS OF PRODUCT DATA**

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

# 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.

#### LEGAL DISCLAIMER

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 contacting SIKA's Technical Service Department via email at tsmh@us.sika.com. 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 EX-PRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FIT-NESS 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.

#### PRODUCT DATA SHEET

Sikaflex<sup>®</sup>-250 UC-1 Version 02.01 (03 - 2023), en\_US 012001210188001000 Sika Corporation 30800 Stephenson Highway Madison Heights, MI 48071 U.S.A. Telephone: +1 248-577-0020

Email: tsmh@us.sika.com

