BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-250 UH-1 Cool

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)		1.21 kg/l
Non-sag properties		Very Good
Application temperature	adhesive ambient	10 – 35 °C 10 – 35 °C
Skin time (CQP019-1)		30 minutes [A]
Curing speed (CQP049-1)		See diagram 1
Shore A hardness (CQP023-1 / ISO 48-4)		61
Tensile strength (CQP036-1 / ISO 527)		7 MPa
Elongation at break (CQP036-1 / ISO 527)		500 %
E-Modulus (CQP036-1 / ISO 527)	1 – 10 %	5.6 MPa
Tensile lap-shear strength (CQP046-1 / ISO 4587)		4 MPa
Shelf life		6 months [B]

CQP = Corporate Quality Procedure

[A] 23 °C / 50 % r.h.

[B] stored below 25 °C in unopened container

DESCRIPTION

Sikaflex®-250 UH-1 Cool is a 1-component, room temperature applied 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 UH-1 Cool is manufactured in accordance with IATF 16949:2016 quality assurance system.

PRODUCT BENEFITS

- 1-component application
- Room temperature applied
- Primerless to paint capable
- High initial strength
- PVC- and solvent free
- Short cut-off string
- Good working characteristics

AREAS OF APPLICATION

Sikaflex®-250 UH-1 Cool is suitable for automated and manual direct glazing as well as permanent elastic bonding of components in the automotive industry. Sikaflex®-250 UH-1 Cool bonds well to numerous substrates. Common substrates are pre-treated ceramic frits and glasses with corresponding UV protection as well as cleaned e-coated 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.

CURE MECHANISM

Sikaflex®-250 UH-1 Cool 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).

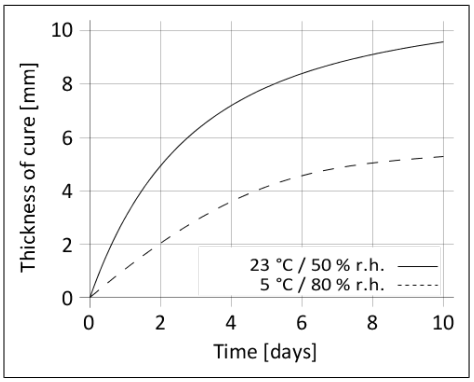

Diagram 1: Curing speed Sikaflex®-250 UH-1 Cool

CHEMICAL RESISTANCE

Sikaflex®-250 UH-1 Cool 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®-250 UH-1 Cool 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).

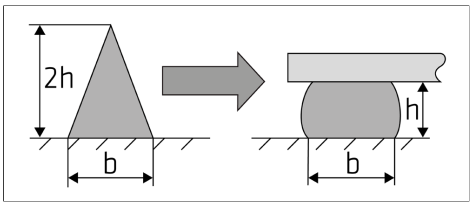

Figure 1: Recommended bead configuration

Sikaflex®-250 UH-1 Cool 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®-250 UH-1 Cool may be removed from tools and equipment with Sika® 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	52.8 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

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Sika Corporation
30800 Stephenson Highway
Madison Heights, MI 48071
U.S.A.
Telephone: +1 248-577-0020
Email: tsmh@us.sika.com
www.sikausa.com