BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-250 HMA-3 MOD + SikaBooster®-20 W

Accelerated, high modulus and primerless to paint direct glazing adhesive with high initial grip

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base		Polyurethane
Color (CQP001-1)		Black
Cure mechanism		Moisture-curing [A]
Density (uncured)	Sikaflex®-250 HMA-3 MOD SikaBooster®-20 W	1.19.kg/l 1.11 kg/l
Booster content	by volume	1.5 %
Application temperature	adhesive booster ambient	55 – 65 °C 15 – 35 °C 15 – 35 °C
Open time (CQP526-1)		10 minutes [B]
Early tensile lap-shear strength (CQP046-1 / ISO 4587)		See table 1
Shore A hardness (CQP023-1 / ISO 48-4)		73
Tensile strength (CQP036-1 / ISO 527)		8 MPa
Elongation at break (CQP036-1 / ISO 527)		330 %
Tear propagation resistance (CQP045-1 / ISO 34)		10 N/mm
Tensile lap-shear strength (CQP046-1 / ISO 4587)		6 MPa
Shear modulus (CQP081-1)	at 10 %	3 MPa
Insulation resistance (CQP079-2 / DIN IEC 60167)	at 10 V	$6 \cdot 10^6$ Ωcm
Shelf life	Sikaflex®-250 HMA-3 MOD SikaBooster®-20 W	9 months [C] 9 months [C]
Mixer		MIXPAC™ MS 13-18G

CQP = Corporate Quality Procedure [A] moisture provided by SikaBooster®-20 W [B] 23 °C / 50 % r.h. [C] stored below 25 °C in unopened container

DESCRIPTION

Sikaflex®-250 HMA-3 MOD + SikaBooster®-20 W is an accelerated, high modulus polyurethane adhesive system for direct glazing applications. With the use of SikaBooster®-20 W, it cures largely independently of atmospheric moisutre. The product is developed for assembly bonding in automotive industry.
Sikaflex®-250 HMA-3 MOD + SikaBooster®-20 W is manufactured in accordance with ISO 9001 / 14001 quality assurance system.

PRODUCT BENEFITS

- Accelerated curing
- High modulus
- Moisture independent curing
- Pre-treatmentless to many paints
- PVC- and solvent free
- Short cut-off string
- Good working characteristics

AREAS OF APPLICATION

Sikaflex®-250 HMA-3 MOD + SikaBooster®-20 W is suitable for automated and manual direct glazing as well as permanent elastic bonding of components in the automotive industry.
Sikaflex®-250 HMA-3 MOD + SikaBooster®-20 W bonds well to numerous substrates. Common substrates are pre-treated UV protected glass, pre-treated cermic frit, e-coat and painted surfaces.
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 HMA-3 MOD + SikaBooster®-20 W cures by reaction with moisture provided by SikaBooster®-20 W and largely independent from atmospheric moisture. For typical strength build up data with 1.5 vol% SikaBooster®-20 W see table below.

Time [h]	Lap-shear-strength [MPa] (CQP046-1)
4	0.6
6	1.9
24	4.7

Table 1: Strength build up applied at 60 °C adhesive temperature

CHEMICAL RESISTANCE

Sikaflex®-250 HMA-3 MOD + SikaBooster®-20 W is generally resistant to fresh water, seawater, diluted acids and diluted caustic solutions; temporarily resistant to fuels, ethanol, mineral oils, 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 HMA-3 MOD + SikaBooster®-20 W needs to be processed with an adequate dispensing system. The mixer type must be respected (see table Typical Product Data).
Deviation from described mixing-ratio has to be tested, to ensure product properties.
Sikaflex®-250 HMA-3 MOD + SikaBooster®-20 W shall be applied between 15 °C and 35 °C (ambient) but changes in reactivity and application properties have to be considered.
The temperature for substrate needs to be at least 3 °C above the dew point.

To ensure a uniform thickness of the bondline it is recommended to apply the adhesive in form of a triangular bead (see figure 1).

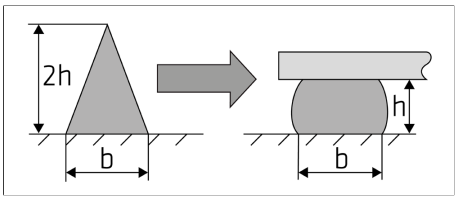

Figure 1: Recommended bead configuration

The open and curing time is significantly shorter in hot and humid climate. The parts must always be joined within the open time.
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.

Tooling and finishing

Sikaflex®-250 HMA-3 MOD + SikaBooster®-20 W is not suitable for tooling.

Removal

Uncured Sikaflex®-250 HMA-3 MOD + SikaBooster®-20 W 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 such as Sika® Cleaner-350H 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

Sikaflex®-250 HMA-3 MOD

Drum	195 l

SikaBooster®-20 W

Pail	23 l

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.

HEALTH AND SAFETY INFORMATION

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

DISCLAIMER

The information, and, in particular, the recommendations relating to the application and enduse 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.

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