

## PRODUCT DATA SHEET

# Sikaflex®-630 HD-2

Flexible headlamp assembly adhesive with rapid early strength development

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

Chemical base	Polyurethane
Color (CQP001-1)	Black
Cure mechanism	Moisture-curing
Density (uncured)	1.13 kg/l
Application temperature	product 90 – 100 °C
Open time (CQP526-1)	2 minutes <sup>A</sup>
Curing speed (CQP049-1)	See diagram 1
Shrinkage (CQP014-1)	1 %
Shore A hardness (CQP023-1 / ISO 48-4)	50
Tensile strength (CQP036-1 / ISO 527)	8 MPa
Elongation at break (CQP036-1 / ISO 527)	1000 %
E-Modulus (CQP036-1 / ISO 527)	0.5 – 5 % 3 MPa
Tear propagation resistance (CQP045-1 / ISO 34)	32 N/mm
Tensile lap-shear strength (CQP046-1 / ISO 4587)	3 MPa
Service temperature	according to WSS-M11P28-D 4 hours 107 °C 120 °C
Shelf life	12 months <sup>B</sup>

CQP = Corporate Quality Procedure

<sup>A)</sup> depends on application temperature and joining method <sup>B)</sup> stored below 25 °C in unopened container

**DESCRIPTION**

Sikaflex®-630 HD-2 is a 1-component high flexible polyurethane headlamp assembly adhesive with superior early strength development. It cures on exposure to atmospheric humidity.

**PRODUCT BENEFITS**

- 1-component application
- High flexibility
- Rapid early strength attainment
- Good fogging behavior
- GMW16506 listed
- WSS-M11P28-D listed

**AREAS OF APPLICATION**

Sikaflex®-630 HD-2 is suitable for permanent bonding of polar plastics like PC and PC/ABS. Flame or plasma pre-treatment allows to bond also non-polar plastics like PP. The fast early strength development can typically allow a headlamp leak test to be performed 2 – 10 minutes after the bonding process. The duration of this time-span depends significantly on several factors, such as the size of the headlamp, the test pressure, etc. 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®-630 HD-2 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).

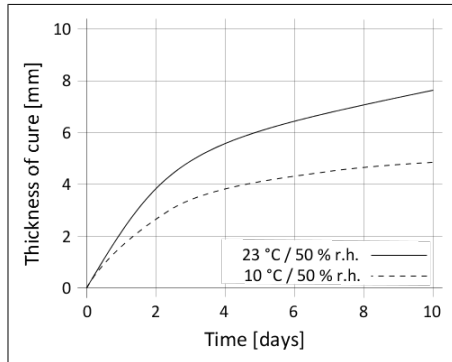


Diagram 1: Curing speed Sikaflex®-630 HD-2

## CHEMICAL RESISTANCE

Sikaflex®-630 HD-2 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.

Physical pre-treatment steps has to be additionally tested on the production line.

## Application

Sikaflex®-630 HD-2 can be processed between 15 °C and 35 °C (ambient) but changes in application properties have to be considered.

It is processed with a corresponding pump equipment. Best results have been achieved with piston doser/metering units.

The open time is significantly shorter in cold climate. Never join bonding parts if the adhesive has already built a skin.

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

## Removal

Uncured Sikaflex®-630 HD-2 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

Cartridge	300 ml
Cardboard tube	25 kg
Pail	25 kg

## 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.

## PRODUCT DATA SHEET

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