BUILDING TRUST

PRODUCT DATA SHEET

Sikaflex®-2K/MS

2-component assembly adhesive

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties		Sikaflex®-2K/MS (A)	Sikaflex®-2K/MS (B)
Chemical base		Silane terminated polymer (STP)	
Color (CQP001-1)		White	Gray
	mixed	Grey	
Density (uncured)		1.38 kg/l	1.33 kg/l
	mixed	1.35 kg/l	
Mixing ratio	by volume	1:1	
Non-sag properties		Fair	
Application temperature		5 – 30 °C	
Skin time (CQP019-1)		20 minutes [A]	
Open time (CQP526-1)		5 minutes [A]	
Curing speed (CQP046-1)		see table [A]	
Shore A hardness (CQP023-1 / ISO 48-4)		50	
Tensile strength (CQP036-1 / ISO 527)		2.4 MPa	
Elongation at break (CQP036-1 / ISO 527)		250 %	
Tensile lap-shear strength (CQP046-1 / ISO 4587)		1.4 MPa	
Service temperature (CQP513-1)		-40 – 90 °C	
Shelf life		12 months [B]	

CQP = Corporate Quality Procedure

[A] 23 °C / 50 % r.h.

[B] stored between 5 and 25 °C

DESCRIPTION

Sikaflex®-2K/MS is a fast curing 2-component silane terminated polymer assembly adhesive which cures by chemical reaction of both components.

PRODUCT BENEFITS

- Minimal pre-treatment required for most common substrates in the Wind industry
- Fast strength build up
- High strength and flexibility
- Contains neither isocyanates nor solvents
- Easy application

AREAS OF APPLICATION

Sikaflex®-2K/MS is used where a strong and durable sealant or adhesive is required.
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

The curing of Sikaflex®-2K/MS takes place by chemical reaction of the two components. For typical strength build-up values see table below.

Time [h]	Lap-Shear Strength [MPa]
4	0.6
6	0.8
8	1

Table 1: Strength build-up Sikaflex®-2K/MS

CHEMICAL RESISTANCE

Sikaflex®-2K/MS is generally resistant to fresh water, seawater, diluted acids and diluted caustic solutions; temporarily resistant to fuels, 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 and dust. Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond. All pretreatment steps must be confirmed by preliminary tests on original substrates considering specific conditions in the assembly process.

Application

Sikaflex®-2K/MS needs to be processed with an adequate dispensing system.
Sikaflex®-2K/MS can be applied between 5 °C and 30 °C but changes in reactivity and application properties have to be considered. The optimum temperature for substrate and sealant is between 15 °C and 25 °C. To ensure a uniform thickness of the bondline it is recommend to apply the adhesive in form of a triangular bead (see figure 1).

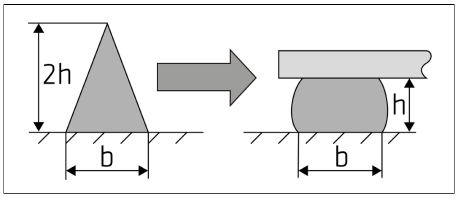

Figure 1: Recommended bead configuration

The open time is significantly shorter in hot and humid climate. The parts must always be joint within the open time. As a rule of thumb, a change of + 10 °C reduces the open time by half.
For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Industry.

Tooling and finishing

Tooling and finishing must be carried out within the open time of the adhesive. We recommend the use of Sika® Tooling Agent N. Other finishing agents must be tested for suitability and compatibility.

Removal

Uncured Sikaflex®-2K/MS can 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!

Overpainting

Sikaflex®-2K/MS can be best painted within the skin formation time. If painting processes take place after the sealant has built a skin, adhesion could be improved by treating the joint surface with Sika® Aktivator-100 or Sika® Aktivator-205 prior to paint process. If the paint requires a baking process (> 80 °C), best performance is achieved by allowing the sealant to fully cure first. All paints have to be tested by carrying out preliminary trials under manufacturing conditions. The elasticity of paints is usually lower than of sealants. This could lead to cracking of the paint in the joint area.

STORAGE CONDITIONS

Sikaflex®-2K/MS has to be kept between 5 °C and 25 °C in a dry place. Do not expose it to direct sunlight or frost. After opening of the packaging, the content has to be protected against humidity.
The lowest allowed temperature during transportation is -15 °C.

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

PACKAGING INFORMATION

Sikaflex®-2K/MS (A)

Pail	20 l
Drum	190 l

Sikaflex®-2K/MS (B)

Pail	20 l
Drum	190 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

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

Sika Danmark A/S
Hirsemarken 5
3520 Farum
Tlf. +45 48 18 85 85
www.sika.dk