



# Adhesive

SurABond<sup>®</sup> SK 289 SB-2

Ideal for the Electronic Industry

Adhesions with high load capacity against polar and non-polar organic solvents and water

# Product Information

## Adhesive **SurABond® SK 289 SB-2**



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SK 289 SB-2

*The SurABond® SK 289 SB-2 adhesive is RoHS-compliant in accordance to the European directive 2011/65/EC. All ingredients are pre-registered according to REACH Regulation (EC) No. 1907/2006.*

### 1. Introduction

This product information seeks to ensure the proper use of the **SurABond® SK 289 SB-2** adhesive and prevent eventual mistakes, which can lead to quality insufficiencies or adverse effects.

SurABond® SK 289 SB-2 is a one-component masking lacquer based on an addition-cured silicone.

SurABond® SK 289 SB-2 reveals a very high bond on metals, glass and ceramics and is well-suited for the application in electronic industries. The obtained coatings are viscoplastic and show a high strain resistant against polar and unipolar organic solvents and water.

SurABond® SK 289 SB-2 is applicable in the temperature range of –50 to +180 °C.

Distinguished adhesion on:

- **Metals**
- **Glass**
- **Ceramics**



# Product Information

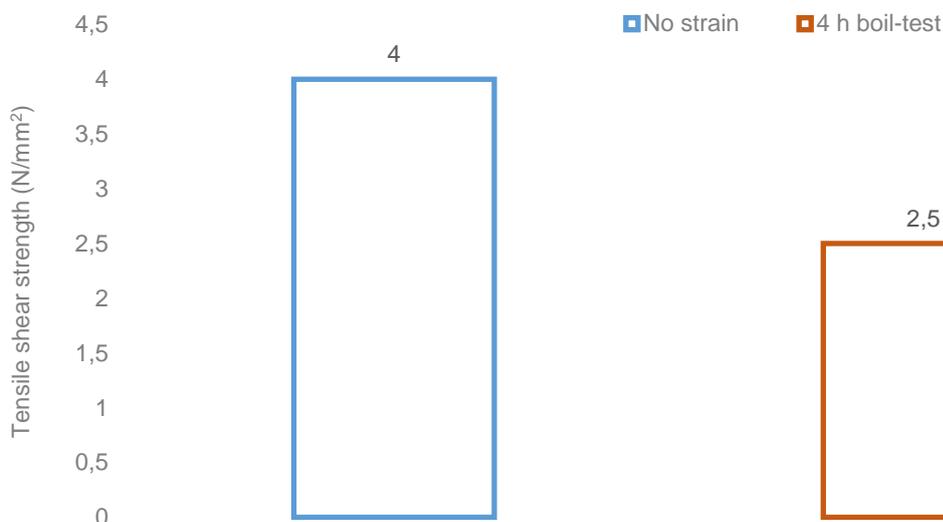
## 2. Performance Tests

Tensile shear strength test based on DIN 53283 standard – adhesive surface 20 mm<sup>2</sup>

The adhesion of SurABond® SK 289 SB-2 was tested by the determination of the tensile shear strength based on DIN 53283 standard. The jointing materials used were stainless steel with a surface of 20 mm<sup>2</sup>. The surface was pretreated with the SurASil® process and an appropriate adhesion promoter. The tensile shear strength of the bonded materials was measured without strain as well as after 4 hours boil-test.

The results (Figure 1) show a high tensile shear strength of 4 N/mm<sup>2</sup> for stainless steel. The strain test (4 hours in boiling water) revealed a minor influence of the adhesion of SurABond® SK 289 SB-2 and the tensile shear strength decrease slightly by about 37%.

### Tensile shear strength test with SurABond® SK 289 SB-2



**Figure 1:** Tensile shear strength test using the SurABond® SK 289 SB-2 adhesive on stainless steel (adhesive surface 20 mm<sup>2</sup>).

# Product Information

## 3. Surface Pretreatment

The surface to be adhering should be dry as well as free of dust and other impurities. We recommend alcohol, acetone, ethyl acetate or other cleaners.

## 4. Processing

SurABond® SK 289 SB-2 is a thixotropic one-component masker lacquer and can be used immediately.

SurABond® SK 289 SB-2 can be applied by screen printing as well as by other common techniques.

SurABond® SK 289 SB-2 is well-suited for screen printing.

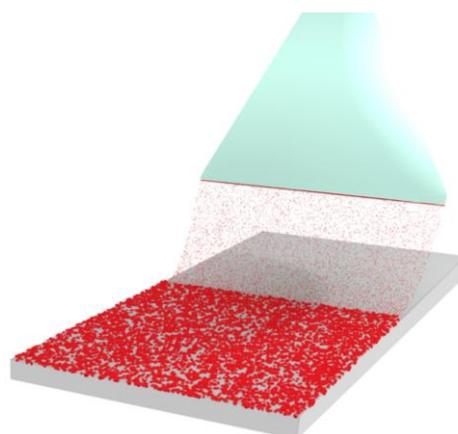
## 5. Curing Conditions

SurABond® SK 289 SB-2 has to be cured at 120 °C for 1 hour.

## 6. Additional Information

The adhesion of SurABond® SK 289 on the appropriate substrates can be significantly enhanced by the application of adhesion-promoting surface silication (**SurASil® process**) and the **SurAChem® GH 144** adhesion promoter.

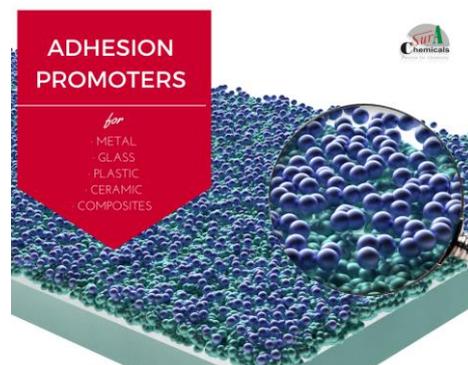
1. Surface silication: The activation of the surface is very advantageous to influence the adhesion of glues, coatings and printing media. The SurASil® process (Figure 2) offers a significant enhancement of the adhesion by the deposition of a reactive silicate layer. The very thin silicate layer arises by the combustion of a silane additive in a combustion-gas atmosphere. The SurASil® process is suitable for metals, glass, ceramics, plastics or composites.



**Figure 2:** Schematic representation of the SurASil® process.

# Product Information

2. Adhesion promoters: The SurAChem® adhesion promoters (Figure 3) are liquid silane-based adhesion enhancing systems, developed especially to apply with the SurABond® adhesives and SurACer® coatings but also with other utilizing products. The SurAChem® adhesion promoters are appropriate for metals, glass, ceramics and, after appropriate activation, for plastic surfaces.



**Figure 3:** Schematic representation of an adhesion promoter coating.

## 7. Delivery Form

SurABond® SK 289 SB-2 is available in bottles according to demand.

## 8. Storage

SurABond® SK 289 SB-2 adhesive is in unopened condition and at +5 °C for 6 month after delivery.

## 9. Instructions to Occupational and Health Safety

SurABond® SK 289 SB-2, as addition-cured silicone, does not contain any toxic or aggressive substances.

## 10. Technical Data

	Uncured
Color	blue
Viscosity (Haake PK1-3.0, D = 10 1/s, 20 °C)	ca. 30,000 to 50,000 mPas
Chemical resistance	Excellent to water and water vapor, chemicals and organic solvents
Processing	Suitable for screen printing

# Product Information

For eventual questions or doubts concerning your product, we encourage you to get in touch with SurA Chemicals GmbH.

The information and technical consultation given by SurA Chemicals GmbH, verbally or written, is based on the company's best knowledge and shall only be considered as non-binding advice, also in respect of the protected rights of third parties. The company's technical consultation does not release the customer from own examination concerning the suitability and usability of the company's product. The manufacturer's liability extends solely to the value of the products supplied by SurA Chemicals GmbH and applied by the customer.

SurA Chemicals GmbH guarantees its products to be of perfect quality as stated in its general terms and conditions of sale and delivery.



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