

# SikaSense®-4300FD CA

## Water-Based High Performance Contact Adhesive System

### Technical Product Data (typical values)

Chemical base	PUR dispersion in water
Color	White
Cure mechanism	Drying and chemical crosslinking (with curative)
Bonding Process	Room Temperature Contact Bonding (both faces pre-coated)
Method of Application	Spray gun, roller, or brush
Solid content (TS-SQP002-0)	51%
Density (SQP006-3)	8.7 lbs/gallon
pH Value	7-8
Viscosity	6000 mPa-s
Curative	SikaCure® 4900 CA
Mix Ratio	100 parts by weight SikaSense®-4300 FD CA; 4-5 parts by weight SikaCure®-4900 CA
Application temperature	50° - 95°F (10°-35°C)
Pot Life <sup>1</sup>	8 hours
Coverage	0.26 - 0.65 oz/ft <sup>2</sup> (80-200 g/m <sup>2</sup> )
Drying Conditions <sup>1</sup> (flash off before joining)	25 - 35 minutes (for 100 g/m <sup>2</sup> coverage)
Open Time <sup>1</sup>	At least 1.5 hrs after the flash time
Processing temperature for contact bonding <sup>2</sup>	65-77°F (18-25°C)
Shelf life <sup>3</sup>	24 months

<sup>1</sup> 73°F (23°C) / 50% r.h.

<sup>2</sup> Lower temperatures, down to 50°F (10°C), result in an extension of the drying time and reduction of open time. Do not process this adhesive below 50°F (10°C).

<sup>3</sup> In unopened original containers stored at 41-77°F (5-25°C). Material is sensitive to frost so store above 41°F (5°C). In winter transport only in thermocontainer. Do not freeze!

### Description

SikaSense®-4300FD CA is a ready to use waterborne PUR dispersion contact adhesive with high initial strength and very good resistance against plasticizers. In addition, SikaSense®-4300FD CA offers a short drying time in combination with

a long open time. Both one component and two component application are possible. SikaSense®-4300FD CA in combination with SikaCure®-4900 CA is a high quality laminating adhesive with especially good resistance against heat and water. The two component adhesive is

processed according to the contact bonding procedure. SikaSense®-4300FD CA is manufactured in accordance with the ISO 9001/14001 Quality Assurance System.

Further information available at:  
[www.sikaindustry.com](http://www.sikaindustry.com)

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## Product Benefits

- Easy processing
- Fast Drying
- Long open time
- Solvent free
- Broad adhesion range on wood, metals and plastics
- High initial strength
- Easy positioning of the parts to fit
- Good resistance against heat and weathering
- High resistance against hydrolysis

## Areas of Application

Important uses are bonding flooring in utility vehicles, interior linings for automobiles, panels and front parts for furniture in the 3D laminating process. Suitable substrates are wood, bare or coated metals, GRP, medium density fibreboard (MDF, manufactured of wood fibres), decorative and foamed foils, made of PVC, ABS, ASA, TPO or polyester and also foam backed textile coverings, carpets and floor covers. In the production of utility vehicles SikaSense®-4300FD CA is suitable for the room temperature bonding of different covering materials e.g. PVC flooring, and adjacent stairs, wheel arches, seat brackets and wall coverings. SikaSense®-4300FD CA in combination with the curing agent SikaCure®-4900 CA delivers excellent performance as an adhesive for most synthetic and natural materials and is a customized problem solver in demanding applications. **PRIOR TO USE READ CURRENT PRODUCT DATA SHEET AND MATERIAL SAFETY DATA SHEET FOR THIS PRODUCT AVAILABLE AT [www.sikaindusrt.com](http://www.sikaindusrt.com), OR CONTACT THE TECHNICAL SERVICE DEPARTMENT OF SIKA INDUSTRY AT 888-832-7452.**

## Coverage

Typical coating weights can range from 0.26 - 0.65 oz/ft<sup>2</sup> (80-200 g/m<sup>2</sup>) wet application per side depending on the substrates being bonded. Non-porous substrates generally

require less coating weight for adequate adhesive film formation while porous substrates usually require heavier coating weights.

## Cure Mechanism

Without curing agent, cure takes place only by evaporation of water. With curing agent, cure still begins by evaporation of water and is followed by chemical crosslinking with the curing agent. At room temperature the chemical curing is completed in about 72 hours. Higher temperatures increase and lower temperatures decrease the speed of both the drying and the chemical reaction.

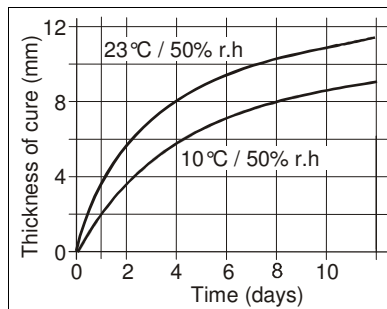


Diagram 1: Curing speed  
SikaSense®-4300FD CA

## Chemical Resistance

Resistant to water and some plasticizers. Advice on specific applications will be given on request. For further information contact the Technical Service Department of Sika Industry at 888-832-7452.

## Method of Application

### Surface preparation

The adhesion surfaces must be clean, dry and free of oils and fats. Release agents from the surface of the plastic parts must be removed with the help of suitable cleaners. For good wetting, the surface tension of plastic parts must be at least 38 dynes/cm<sup>2</sup>. **NOTE:** good wetting increases the chance for acceptable adhesion. Good wetting by itself does not guarantee adhesion.

## Mixing

The mix ratio of SikaSense®-4300FD CA (resin dispersion) with SikaCure® 4900 CA (curative) is 100 parts by weight resin dispersion to 4-5 parts by weight curative.

The curing agent is metered into the continuously stirred dispersion and then mixed with a mechanical mixer to obtain a homogeneous mixture. Care must be taken to avoid air inclusion. The pot life is 8 hours at room temperature.

## Application

Application temperature range is 50 - 95°F (10°-35°C). Ideal application range is 65 - 77°F (18°-25°C). The adhesive is generally applied with a roller, a brush or a spray gun with pressure pot. Ambient temperature should not exceed 35 C. Increasing air velocity will reduce drying time and maximize open time. For further information contact the Technical Service Department of Sika Industry at 888-832-7452.

## Removal

Tap water is sufficient to clean the tools from uncured adhesive residues. Cured adhesive can only be removed by mechanical means or suitable solvent. Strictly follow solvent manufacturer's instructions for use and warnings.

## Overpainting

This product should not be overpainted.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

## Limitations

Do not process this adhesive below 50°F (10°C) and above 95°F (35°C). Material is sensitive to frost so store above 41°F (5°C). In winter transport only in thermocontainer. Do not freeze!

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**CAUTION: IRRITANT.** Contains Polyurethane Dispersion (CAS: Mixture). Causes respiratory tract irritation. May cause eye and skin irritation. May be harmful if swallowed.

- **KEEP OUT OF REACH OF CHILDREN**
- **NOT FOR INTERNAL CONSUMPTION**
- **FOR INDUSTRIAL USE ONLY**
- **KEEP CONTAINER TIGHTLY CLOSED**

#### HMIS

Health	2
Flammability	1
Reactivity	0
Personal Protection	D

#### First Aid

**Eyes** – Hold eyelids apart and flush thoroughly with water for 15 minutes. **Skin** – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. **Inhalation** – Remove to fresh air. **Ingestion** – Do not induce vomiting. Dilute with water. Contact physician. **In all cases contact a physician immediately if symptoms persist.**

#### Further Information

Copies of the following publications are available on our website [www.sikaindustry.com](http://www.sikaindustry.com):

- Material Safety Data Sheets
- Product Data Sheet
- Sika Primer Chart
- General guidelines for bonding and sealing with Sika products

**In case of emergency call:**  
**Chemtrec: 800-424-9300**  
**International: 703-527-3887**

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safety related data. It is highly recommended to read the actual Material Safety Data Sheet before using the product.

#### Packaging Information

Pail	4 kg
Drum	50 gal

#### Value Basis

All technical data stated on this Product Data Sheet are based on the results of laboratory tests only. Actual measured data in the field may vary due to site specific conditions which are not known to Sika and beyond our control.

#### Handling and Storage

Avoid direct contact. Wear personal protective equipment (chemical resistant goggles/gloves/clothing) to prevent direct contact with skin and eyes. Use only in well ventilated areas. Open doors and windows during use. Use a properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and laundry before reuse.

#### Clean Up

Tap water is sufficient to clean the tools from uncured adhesive residues. Cured adhesive can only be removed by mechanical means or suitable solvent. Strictly follow solvent manufacturer's instructions for use and warnings. Use personal protective equipment (chemical resistant gloves/ goggles/clothing). Without direct contact, remove spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

#### Limited Material Warranty

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES IMPLIED OR EXPRESS SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

#### Legal Notes/Disclaimer

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of

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the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at [www.sikacorp.com](http://www.sikacorp.com) or by calling 201-933-8800.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Material Safety Data Sheet which are available at [www.sikaindustry.com](http://www.sikaindustry.com). Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Material Safety Data Sheet prior to product use.

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