

SikaSil® AS-785

Two Component High Performance, Fast Curing Industrial Assembly Sealant/Adhesive

Technical Product Data (Typical values. Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.")

Properties	Component A Sikasil®AS-785 A	Component B Sikasil®AS-785 B
Chemical base	2 component silicone	
Color (CQP1 001-1)	White	Black, Translucent
Color mixed	BlackGrey, White	
VOC (EPA method 24)	24.3g/L (A+B Combined)	
Cure mechanism	Polycondensation	
Cure type	Alkoxy	
Density (CQP 006-4)	11.7 lbs/gallon approx.	8.8 lbs/gallon approx.
Density Mixed	11.4 lbs/gallon approx.	
Mixing ratio A:B by volume	10:1	
A:B by weight	13:1	
Viscosity at 0.89 s-1 (CQP 029-6)	1,200Pa-s approx.	400 Pa-s approx.
Consistency	Paste	
Application temperature	40 - 105°F (5 - 40°C)	
Snap time ^{2,3} (CQP 554-1)	12 min approx.	
Tack-free time ² (CQP 019-1)	40 min approx.	
Shore A-hardness (CQP 023-1 / ISO 868)	45 approx.	
Tensile strength (CQP 036-1 / ISO 37)	290 psi approx.	
Elongation at break (CQP 036-1 / ISO 37)	250% approx.	
100% modulus (CQP 036-1 / ISO 37)	174 psi approx.	
Thermal resistance (CQP 513-1) Short term	375°F (190°C) approx.	
4 hours	390°F (200°C) approx.	
1 hour	-40 - 300°F approx. (-40 - 150°C)	
Service temperature		
Shelf life (storage below 25°C) (CQP 016-1)	15 months	9 months

1) CQP = Corporate Quality Procedure 2) 73°F (23°C) / 50% r.h. 3) The Snap time can increase up to 20 min with a component B at the end of shelf life

Description

Sikasil® AS-785 is a two-part, non-corrosive, fast-curing silicone sealant and adhesive, especially designed for automated industrial processes. Sikasil® AS-785 is manufactured in accordance with ISO 9001/14001 quality assurance system and the 'Responsible Care' program.

Product Benefits

- Excellent adhesion to a wide variety of substrates
- Very good mechanical properties
- Outstanding adhesion and mechanical performance under harsh environmental conditions
- Remains flexible over a wide temperature range
- Long-term durability
- Low volatility
- Meets EOTA ETAG 002
- UL®certified: UL94 V-1, QOQW2 (-40°C –105°

Areas of Application

Sikasil® AS-785 is especially designed for automated bonding of structural adhesive joints. It is further suitable for high demanding industrial bonding and sealing applications like those in the Solar and White Goods business. The product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

Industry



Cure Mechanism

Sikasil® AS-785 starts to cure immediately after mixing the two components. The speed of the reaction depends mainly on the temperature, i.e. the higher the temperature the faster the curing process. To increase the curing speed Sikasil® AS-785 can be heated up to (>122°F (50°C)) risk of bubble formation). Since the curing process does not require moisture the products may also be used in confined spaces. The mixer open time, i. e. the time the material can remain in the mixer without flushing or extrusion of product is significantly shorter than the snap time indicated above. Please contact Sika Technical Service for detailed information at tsmh@us.sika.com.

Method of Application

Mixing

Before applying Sikasil® AS-785 both components must be mixed homogeneously and air-free in the correct ratio as indicated on data table (accuracy +/-10%). Most commercially available metering and mixing equipment are suitable. Contact the System Engineering of Sika at tsmh@us.sika.com for specific advice. The Sikasil® AS-785 B-component is moisture sensitive, therefore the exposure to air has to be reduced to an absolute minimum. Please consult our Sika Technical Service for detailed information at tsmh@us.sika.com.

Surface preparation

Surfaces must be clean, dry and free from oil, grease and dust. For advice on specific applications and surface pretreatment methods please contact Sika Technical Service at tsmh@us.sika.com.

Application

Joints must be properly dimensioned. Basis for calculation of the necessary joint dimensions are the technical values of the adhesive and the adjacent materials, the exposure of the elements, their construction and size as well as external loads. Please contact Sika Technical Service for detailed information at tsmh@us.sika.com.

Tooling and finishing

Further information available at:
www.sikausa.com

Sika Corporation
Industry Division
30800 Stephenson Highway
Madison Heights, MI 48071
USA
Tel. 248 577 0020
Fax 248 577 0810

If necessary, tooling and finishing must be carried out within the snap time of the adhesive. No tooling agents must be used.

Removal

Uncured Sikasil® AS-785 may be removed from tools and equipment with Sika® Remover-208 or another suitable solvent.

Over Painting

Sikasil® AS-785 cannot be over-painted.

Limitations

For specific information regarding compatibility between various Sikasil® products contact the Technical Department of Sika Industry. Sikasil® AS adhesives and sealants are compatible with Sika® Spacer Tape HD. Prior to use all materials in contact with Sikasil® AS-785 need to be approved by Sika. Where two or more different reactive process materials are used, allow the first to cure completely before applying the next. Sikasil® engineering sealants and adhesives may only be used in industrial assembly applications by experienced professionals and after a detailed examination. A written approval of the corresponding project details by the Technical Department of Sika Industry is recommended. The suitability of Sikasil® AS-785 for a specific application including compatibility and adhesion must be tested in advance on original substrates and under actual conditions. The above information is offered for general guidance only. Advice on specific applications will be given on request to Sika Technical Service at tsmh@us.sika.com.

Warning

SikaSil® AS-785 (A) Contains: Polysiloxanediol (CAS: 70131-67-8). Causes skin irritation. Causes serious eye irritation. **WARNING!** This product contains a chemical known in the State of California to cause cancer. **WARNING!** This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

Danger

Sikasil® AS-785 (B) Contains: 4, 4, 7, 7-tetraethoxy-3, 8-dioxa-4, 7-disiladecane (CAS: 16068-37-4), Carbon black (CAS: 1333-86-4), N-[3 (triethoxysilyl) propyl] ethylenediamine (CAS: 5089-72-5), Aminoalkyltrialkoxysilane (CAS: 82985-35-1), [3-(2, 3-epoxypropoxy) propyl] trimethoxysilane (CAS: 2530-83-8), Dibutyltin di (acetate) (CAS: 1067-33-0), methanol (CAS: 67-56-1). Combustible liquid May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer. May damage fertility or the unborn child. **WARNING!** This product contains a chemical known in the State of California to cause cancer. **WARNING!** This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

HMIS

	Part A	Part B
Health	*2	*3
Flammability	1	2
Reactivity	0	0
Personal Protective Equipment	X	X

First Aid

IF ON SKIN: Wash with plenty of soap and water. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **IF exposed or confined:** Get medical advice/ attention. Immediately call a POISON CENTER or doctor/ physician. **IF skin irritation or rash occurs:** Get medical advice/ attention.

Further Information

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.

- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY



- **KEEP CONTAINER TIGHTLY CLOSED**
- **FOR PROFESSIONAL USE ONLY**

Copies of the following publications are available on our website www.sikausa.com:

- Material Safety Data Sheets
- Product Data Sheet

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

Packaging Information

Cartridge	Component A/B: 490 ml
Hobbock	Component B: 20kg
Drum	Component A: 260 kg

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

Part (A)

- Avoid exceeding the given occupational exposure limits
- Do not get in eyes, on skin, or on clothing.
- Use personal protective equipment
- Smoking, eating and drinking should be prohibited in the application area.
- Follow standard hygiene measures when handling chemical products
- Keep container tightly closed in a dry and well ventilated place
- Store in accordance with local regulations

Part (B)

- Do not breathe vapors or spray mist
- Avoid exceeding the given occupational exposure limits
- Do not get in eyes, on skin, or on clothing
- Use personal protective equipment
- Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used

- Smoking, eating and drinking should be prohibited in the application area
- Pregnant women or women of child-bearing age should not be exposed to this product
- Follow standard hygiene measures when handling chemical products
- Store in original container
- Keep in a well-ventilated place
- Observe label precautions
- Store in accordance with local regulations

Recommended product storage is below 77°F (25°C).

Cleanup

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

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 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.sikausa.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.sikausa.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.

Further information available at:
www.sikausa.com

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