

Sikasil® WT-485

2 C high-performance, fast curing window adhesive

Technical Product Data

Properties	Component A Sikasil® WT-485 A	Component B Sikasil® WT-485 B
Chemical base	2-part silicone	
Color (CQP ¹ 001-1)	white	black, grey, translucent
Color mixed	black, grey	
Cure mechanism	polycondensation	
Cure type	alkoxy	
Density (CQP 006-4)	1.40 kg/l approx.	1.05 kg/l approx.
Density mixed	1.37 kg/l approx.	
Mixing ratio	A : B by volume A : B by weight	10 : 1 13 : 1
Viscosity (CQP 029-5)	1'200 Pa·s approx.	400 Pa·s approx.
Consistency	paste	
Application temperature	5 - 40 °C	
Snap time ^{2,3} (CQP 536-3)	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 527)	2.1 N/mm ² approx.	
Elongation at break (CQP 036-1 / ISO 527)	240 % approx.	
Tear propagation resistance (CQP 045-1 / ISO 34)	7.0 N/mm approx.	
100 % modulus (CQP 036-1 / ISO 527)	1.2 N/mm ² approx.	
Movement accommodation capability (ASTM C 719)	± 25 %	
Thermal resistance (CQP 513-1)	180 °C	
Short term	4 hours 1 hour	190 °C 200 °C
Service temperature	-40 – 150 °C	
Shelf life (storage below 25 °C) (CQP 016-1)	cartridge pail, drum	9 months 15 months 9 months

¹⁾ CQP = Corporate Quality Procedure

²⁾ 23°C / 50% r.h.

³⁾ The snap time can increase add. 6 min. with the B-component at the end of shelf life.

Description

Sikasil® WT-485 is a fast-curing two-part silicone adhesive which builds up mechanical strength and adhesion within a short period of time.

Product Benefits

- Excellent adhesion to most relevant substrates.
- Outstanding UV and weathering resistance.
- Remains flexible over a wide temperature range.
- Long-term durability.
- Meets requirements of EOTA ETAG 002 and ASTM C 1184.

Areas of Application

Sikasil® WT-485 rapidly builds up strength and adhesion especially to glass, (coated) metal, wood and PVC. Due to its good mechanical properties it is most suitable for structural bonding of IG units into window frames and back-bedding. This product is only suitable for professional experienced users. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.



Cure Mechanism

Sikasil® WT-485 starts to cure immediately after mixing the two components.

The speed of the reaction depends mainly on the temperature: the higher the temperature the faster the curing speed.

Heating above 50 °C is not advisable as it may lead to bubble formation.

Please note, that – especially when static mixers are used – the mixer open time, i. e. the time the material can remain in the mixer without flushing or product extrusion, is significantly shorter than the snap time indicated above. For more information please contact the Technical Department of Sika Industry.

Application Limits

Most Sikasil® WS, FS, SG, IG, WT, AS and other engineering silicone sealants manufactured by Sika are compatible with each other and with SikaGlaze® IG sealants. For specific information regarding compatibility between various Sikasil® and SikaGlaze® products please contact the Technical Service Department of Sika Industry. Sikasil® WT-485 adhesive may only be used in window bonding applications by experienced professionals and only after a detailed examination and written approval of the corresponding project details by the Technical Department of Sika Industry.

The compatibility of gaskets, backer rods, setting blocks and other accessory materials with Sikasil® WT-485 must be tested in advance.

Method of Application

Surface preparation

Surfaces must be clean, dry and free from oil, grease and dust.

Advice on specific applications and surface pretreatment methods is available from the Technical Department of Sika Industry.

Application

Before processing Sikasil® WT-485 both components have to be mixed homogeneously and air-bubble-free in the correct ratio as indicated before with an accuracy of $\pm 10\%$. Please contact the System Engineering of Sika Industry for specific advice.

The B-part is moisture-sensitive and contact to air has therefore to be minimized.

Joints must be properly dimensioned. Basis for calculation of the necessary joint dimensions are the technical values of the adhesive (mechanical properties) in combination with the technical requirements defined by the customer. For more information please contact the Technical Department of Sika Industry.

Tooling and finishing

Tooling and finishing must be carried out within the snap time of the adhesive.

Removal

Uncured Sikasil® WT-485 may be removed from tools and equipment with Sikasil® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically.

Hands and exposed skin should be washed immediately using Sikasil® Handclean towels or a suitable industrial hand cleaner and water. Do not use solvents!

Overpainting

Sikasil® WT-485 cannot be overpainted.

Further Information

Copies of the following publications are available on request:

- Safety Data Sheets
- General Guidelines "Window Bonding with Sikasil® WT Adhesives"

Packaging Information

Sikasil® WT-485 (A)

Twin line cartridge	490 ml
Pail	26 kg
Drum	260 kg

Sikasil® WT-485 (B)

Pail	20 kg
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Value Bases

All technical data stated in this Product Data Sheet are laboratory test based. Current measured values may vary due to factors beyond our influences.

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.

Legal Notes

The information, and, in particular, the recommendations relating to the application and end-use 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.

Further information available at:

www.sika.it
www.sika.com

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