BUILDING TRUST

PRODUCT DATA SHEET

Sikasil® WT-66 PowerCure

Accelerated window bonding adhesive

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Chemical base	Silicone
Color (CQP001-1)	Grey, black
Cure mechanism	Moisture-curing [A]
Cure type	Neutral
Density (uncured)	1.41 kg/l
Non-sag properties (CQP061-4 / ISO 7390)	Good
Application temperature	5 – 40 °C
Open time (CQP526-1)	15 minutes [B]
Early tensile lap-shear strength (CQP046-1 / ISO 4587)	(see table 1)
Shore A hardness (CQP023-1 / ISO 48-4)	42
Tensile strength (CQP036-1 / ISO 527)	1.7 MPa
100 % modulus (CQP036-1 / ISO 527)	1.1 MPa
Elongation at break (CQP036-1 / ISO 527)	250 %
Tear propagation resistance (CQP045-1 / ISO 34)	3.8 N/mm
Service temperature	-40 – 150 °C
Shelf life (CQP016-1)	9 months [C]

CQP = Corporate Quality Procedure [A] provided by PowerCure [B] 23 °C / 50 % r.h. [C] storage below 25 °C

DESCRIPTION

Sikasil® WT-66 PowerCure is an accelerated 1-component silicone adhesive for bonding insulating glass units or glass panes into a window frame and for back-bedding applications. Sikasil® WT-66 PowerCure is applied using the PowerCure Dispenser and cures largely independent from atmospheric conditions.

PRODUCT BENEFITS

- Accelerated curing speed
- Good UV and weathering resistance
- Good mechanical properties
- Remains flexible over a wide temperature range
- Suitable for bonding of windows classified according DIN EN 1627 burglar resistance class RC 2 and RC 3
- Fulfills requirements according to RAL-GZ 716 part 2, table 3 (PVC and glass) and ift-guideline VE-08/4, part 1, table A4

AREAS OF APPLICATION

Sikasil® WT-66 PowerCure has a wide adhesion range on many substrates such as glass, (coated) metal, PVC and others. Sikasil® WT-66 PowerCure is used for back-bedding applications and bonding of insulating glass units into window frames. It`s structural capabilities enable a stiffening of the window sash. It is further suitable for industrial bonding and sealing applications.
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

Sikasil® WT-66 PowerCure cures mainly by reaction with the accelerator paste.
The speed of the reaction depends mainly on the temperature, i.e. the higher the temperature the faster the curing process. Heating above 50 °C could lead to bubble formation and is therefore not allowed.
For approx. strength build up values see table below.

Time [days]	Tensile lap-strength [MPa]
0.3	0.2
1	0.6
2	0.7
7	0.9
28	1.0

Table 1: Tensile lap-shear strength at 23 °C / 50 % r. h.

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.

Application

The optimum temperature for substrate and sealant is between 15 °C and 25 °C.
Setup the PowerCure Dispenser according to the PowerCure User Manual. If the application is discontinued for more than 10 minutes, the mixer needs to be replaced.
Joints must be properly dimensioned.
Basis for calculation of the necessary joint dimensions are the technical values of the adhesive and the adjacent building materials, the exposure of the building elements, their construction and size as well as external loads.

Tooling and finishing

Tooling and finishing must be carried out within the open time of the adhesive. When tooling freshly applied Sikasil® WT-66 PowerCure, press the adhesive to the joint flanks to get a good wetting of the bonding surface. No tooling agents must be used.

Removal

Uncured Sikasil® WT-66 PowerCure may 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 cleaning towels or a suitable industrial hand cleaner and water.
Do not use solvents on skin.

Overpainting

Sikasil® WT-66 PowerCure cannot be overpainted.

Application limits

Recommended solutions from Sika for structural glazing and window bonding are usually compatible to each other. These solutions consist of products such as Sikasil® SG, IG, WS and WT series. For specific information regarding compatibility between various Sikasil® products and other Sika products contact the Technical Department of Sika Industry.
To exclude materials influencing Sikasil® WT-66 PowerCure, all materials such as gaskets, setting blocks, sealants etc., in direct and indirect contact have to be approved by Sika in advance.
Where two or more different reactive sealants are used, allow the first to cure completely before applying the next one.
The above mentioned Sika process materials may only be used in window bonding applications after a detailed examination and written approval of the corresponding project details by Sika Industry.

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
- General Guideline
  Window Bonding Sikasil® WT Adhesives
- PowerCure User Manual
- PowerCure Quick Reference Guide

PACKAGING INFORMATION

PowerCure Pack	600 ml

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

The information, and in particular, the recommendations relating to the application and enduse 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.

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