Silirub WS+

Technical data

Basis	Polysiloxane
Consistency	Stable paste
Curing system	Moisture curing
Skin formation* (23°C/50% R.H.)	Ca. 12 min
Curing speed * (23°C/50% R.H.)	Ca. 2 mm/24h
Hardness**	30 ± 5 Shore A
Density	Ca. 1,30 g/ml
Elastic recovery (ISO 7389)**	> 80 %
Maximum allowed distortion (ASTM C920)	±50 %
Max. tension (ISO 37)**	Ca. 1,30 N/mm²
Elasticity modulus 100% (ISO 37)**	Ca. 0,50 N/mm²
Elongation at break (ISO 37)**	> 700 %
Temperature resistance**	-60 °C → 180 °C
Application temperature	5 °C → 35 °C

* These values may vary depending on environmental factors such as temperature, moisture, and type of substrates. ** This information relates to fully cured product.

Product description

A high-performance neutral cure silicone that is highly elastic with joint movement allowance of ±50%. Silirub WS+ has been developed for weather sealing of expansion joints in the glass and aluminium composite panel façade industries.

Properties

- Compatible with PVB-film
- UV-resistant
- Meets ASTM C920 elastic ±50%
- Colours have matt finish
- Compatible with sealants for double glazing based on polysulphides and silicones.
- Permanently elastic after curing
- Very good adhesion on many materials
- Resistant against UV-radiation, rain, frost, wind, ozone and extreme temperatures
- Excellent adhesion properties on glass, laminated glass, coated aluminium, galvanised steel, concrete and masonry.

Applications

- Weatherproof sealing of facade elements for glass curtain walls.
- Ideal for aluminium composite panel façade joints where a matt finish is required.
- All usual building, connection, expansion, and dilatation joints.
- Excellent for double glazing system applications.
- Suitable for weatherproof sealing around structurally glazed window panels.

Packaging

Colour: black
Packaging: 600 ml sausage

Shelf life

18 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C.

Chemical resistance

Resistant to intermittent exposure to salt water, detergents, oils, weak acids and bases (preliminary test required). Poor resistance to aromatic solvents, concentrated acids and chlorinated hydrocarbons.

Substrates

Substrates: all usual building substrates
Nature: rigid, clean, dry, free of dust and grease.
Surface preparation: Silirub WS+ has a good adhesion to most substrates. However, for

optimal adhesion and in critical applications, such as joints exposed to extreme weather conditions, high- or water-loaded joints, we recommend to follow a pre-treatment procedure. Prepare non-porous surfaces with a Soudal activator or cleaner (see Technical Data Sheet). Porous surfaces should be primed with Primer 150.
There is no adhesion on PE, PP, PTFE (Teflon®) and bituminous substrates. We recommend a preliminary adhesion test on any substrate. Due to the wide variety materials used in façade technology a preliminary compatibility test is necessary.

Joint dimensions
Glazing and window applications: top sealing = minimum width 4 mm, depth at least 6 mm. Minimum joint width for connection joints around windows: 10 mm. Weatherseal and other applications: joint width 5 - 10 mm: joint depth 5 mm. Joint width 10 - 30 mm: depth = 1/2*width.

Application method
Apply the product by means of a manual-, battery- or pneumatic- caulking gun. Apply Silirub WS+ evenly without air inclusions into the joint. Smoothen the joint with a finger or a spatula with the help of finishing solution. Avoid that soapy solution comes between the joint edges and sealant (to prevent adhesion loss).
Application method: With a manual, pneumatic or accu caulking gun.
Cleaning: Clean with Soudal Surface Cleaner or with Soudal Swipex, immediately after use Cured Silirub WS+ can only be removed mechanically.
Finishing: With a soapy solution or Soudal Finishing Solution before skinning.
Repair: With the same material

Health- and Safety Recommendations
Take the usual labour hygiene into account. Consult label and material safety data sheet for more information.

Remarks
- Not suitable as adhesive for structural glazing applications.
- Do not use on natural stones like marble, granite, (staining). Use Soudal+ S8800 for this application.
- The use of Soudal Surface Activator is recommended in combination with powder coated aluminium.
- A total absence of UV can cause a color change of the sealant.
- Discoloration due to chemicals, high temperatures, UV-radiation may occur. A change in color does not affect the technical properties of the product.
- When finished with a finishing solution or soapy solution, make sure that the surfaces are not touched by this solution. This will cause the sealant not to adhere to that surface. Therefore we recommend to only dip the finishing tool in this solution.
- We strongly recommend not to apply the product in full sunlight as it will dry very fast.
- Do not use in applications where continuous water immersion is possible.
- Not suitable for bonding aquariums.
- Do not use on polycarbonate. Use Silirub PC instead.
- When using different reactive joint sealants, the first joint sealant must be completely hardened before the next one is applied.
- Contact with bitumen, tar or other plasticizer releasing materials such as EPDM, neoprene, butyl, etc. is to be avoided since it can give rise to discoloration and loss of adhesion.

Silirub WS+

Standards and certificates

- Meets ISO 11600 G 25 LM
- Meets ASTM C920 Type S, Grade NS, Class 50, Use T, NT, A and G

Environmental clauses

Leed regulation:

Silirub WS+ conforms to the requirements of LEED. Low –Emitting Materials: Adhesives and Sealants. SCAQMD rule 1168. Complies with USGBC LEED 2009 Credit 4.1: Low-Emitting Materials – Adhesives & Sealants concerning the VOC-content.

Liability

The content of this technical data sheet is the result of tests, monitoring and experience. It is general in nature and does not constitute any liability. It is the responsibility of the user to determine by his own tests whether the product is suitable for the application.