

TECHNICAL SHEET 28.03.01-EN



SIGILL Hybrid Universal 820

Universal adhesive sealant

1. Description, Application

SIGILL Hybrid Universal 820 is a one-component, gun-grade, non-sagging SiMP (Silyl Modified Polymer high modulus construction sealant). It cures under the influence of atmospheric moisture to form a high-performance compound with permanent elasticity and high resistance to ageing and weathering.
 SOLVENT- AND ISOCYANATE-FREE.

2. Certificates

Certified according to:
 EN 15651-1/3/4 TYPE F INT-EXT/ XS3/ PW EXT-INT CC
 ISEGA EC Regulation 1935/2004 for food contact
 EMICODE EC1PLUS protocol
 EUROFINS IAC GOLD protocol
 VOC Emission class label A+

Compliant to:
 ISO 11600 Type F Class 20 sub-class HM
 LEED iEQc 4.1; SCAQMD Rule 1168; BAAQMD Reg 8 Rule 51

3. Technical data

Packaging	290 ml
Color	White, grey
Density (NPT method 06) (23°C and 50% RH)	~ 1.5 g/cm ³
Hardness shore A	~ 28

(DIN 53505)

Skin forming time (NPT method 17) (23°C and 50% RH)	~ 50
Curing trough volume [mm/24h] (NPT method 07) (23°C and 50% RH)	~ 2 mm
Elastic modulus (ISO 37 DIN 53504)	0.6 N/mm ²
Elongation at break (ISO 37 DIN 53504)	460
Tensile strength (ISO 37 DIN 53504)	~ 1,6
Joint movement capability (EN 151651/1; ISO 11600)	+/- 20
Application temperature	from +5° to +40°C
Temperature resistance	from -40°C to +100°C (to 120°C for short term)

4. Installation Conditions

The temperature of the air and the wall base should be from +5 °C to +40 °C, and the relative air humidity should not be higher than 80%. Recommended application temperatures: 15° to 25°C. For easier use or cold weather applications we recommend the material to be stored at approximately 25°C prior to use.

5. Areas of Application

SIGILL Hybrid Universal 820 is a versatile and performant construction sealant for expansion and construction joints in vertical and horizontal applications, sealing and bonding between different materials, external walling and cladding joints. Suitable for metal roof and gutter sealing, bridge and balcony parapets, weatherproofing of joints between brickwork, blockwork, masonry, wood, concrete, metal, window or door frames.

6. Features

- Environmentally friendly – Free of isocyanates and solvents
- No hazard symbol required
- No bubble formation - Odorless
- Bonds and seals at the same time
- Permanently elastic; accommodates joint movement of ±20%
- Easy to extrude with excellent tooling consistency
- Exceptional thixotropy, non-sagging, short cut off string
- Excellent primerless adhesion on all typical construction and industrial materials
- Non-staining on concrete and porous materials
- Excellent resistance to ageing and weathering
- Over-paintable with many water and solvent based paints (preliminary tests recommended)

7. Instruction for Use

The surfaces to be treated should be perfectly clean, dry and free from dust and grease. SIGILL Hybrid Universal 820 has very good adhesion properties without the use of primer on most common building materials. Consequently, the use of the primer is not necessary if the support to be sealed is properly prepared and consolidated. However, varieties of brick, natural stone, plastics, paints, coatings and other treatments of surfaces often presents a difficult surface to which to adhere. Due to the number of unpredictable natures of these substrates, a preliminary test is recommended. Pre-cast panels using form-release agents other than polyethylene film must be sandblasted or mechanically abraded and dust free.

To guarantee free movement of sealant in joints, it is imperative that the sealant does not adhere to the bottom of

the joint, therefore for correct joint making a closed-cell polyethylene bead (joint backing rod) is to be placed at the proper depth.

If necessary, apply appropriate primer to joint sides and observe waiting time to avoid that trapped solvent, in condition of rising temperature, can blow bubbles in the uncured sealant. For best performance, sealant should be gunned into joint when the joint slot is at mid-point of its designed expansion and contraction. Firmly extrude sealant into the joint making sure that it is in full contact with the sides of the joint and with the backing rod at the bottom. Keep the nozzle in the sealant, continue with a steady flow of sealant following the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air. Tooling and finishing must be carried out within the skin time of the sealant.

SIGILL Hybrid Universal 820 can be over-painted. The paint must be tested for compatibility by carrying out preliminary trials. Attention must be observed with the use of alcohol or alkyd-resin since they may interfere with the curing process of the sealant and reduce the drying time of the paint itself. The hardness and film thickness of the paint may impair the elasticity of the sealant and lead to cracking of the paint film. Do not cure in the presence of curing silicone sealants.

Avoid contact with solvent cleaners during cure. When applying sealant, avoid air-entrapment. Since system is moisture-cured, permit sufficient exposure to air.

8. Cleaning of Equipment and Personal Protective Measures

Clean the tools used with ethyl alcohol. When the adhesive has not yet hardened, it can be removed using paper or a cloth. Once hardened, the product can only be removed mechanically. Avoid skin contact by using latex, rubber or polyethylene gloves. If it comes in contact with the skin, remove immediately and wash with soap and water.

9. Storage, Transportation Conditions and Shelf Life

SIGILL Hybrid Universal 820 can be stored for 15 months in its original packaging (unopened container) between 10°C and 25°C in a cool, dry place. The storage temperature should not exceed 25°C for extended periods of time. Keep away from wet areas, direct sunlight and heat sources.

10. Other Information

Technical instructions are given based on our experiences and are given as a guideline for achieving optimal results. We cannot take any responsibility for the damage, caused by incorrect selection of a product, incorrect use or unprofessional work. JUB also bears no responsibility in cases where the substrate for the application of our products is prepared inadequately or with materials of inadequate quality from other manufacturers. In the case of applying our products to existing substrates of old coatings or pre-prepared substrates with materials from other manufacturers, it is obligatory to make appropriate test fields with all the intended applications of JUB products, in accordance with the technical instructions, before starting the work.

Safety measures: Follow the instructions on the safety data sheet of the product.

This technical sheet supplements and replaces all preceding editions. We reserve the right to change and supplement data in the future.

Denomination and date of publishing: TDS 005/25-čad, 25.02.2025