

Reference: D09-1427 / 31.08.2012



Product Declaration - DGNB Neubauversion Büro- und Verwaltungsgebäude (NBV09)

Manufacturer **BOSIG GmbH**

Product Name **Fasatan® TFS**



**Product Rating**

- The product fulfills the requirements of action level 1 to 4 and contributes to achieve 10 (of max. 10) criterion points within Criterion 06 'Risks for the regional environment'.

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Produkt Declaration - LEED® 2009 New Construction And Major Renovations NC & CS

Manufacturer **BOSIG GmbH**

Product Name **Fasatan® TFS**



**Product Rating**

- The product fulfills the requirements for adhesives and sealants and contribute to achieve one LEED credit within IEQ Credit 4.1.



Registered in the PRONOTA Positive List for Building Products, suited for DGNB® – certified buildings.

**Certification:**

The emission behaviour of Fasatan® TFS has been tested independently by the institute for analytic Aurachtal. Fasatan® TFS has been proved and tested to be very low-emission and particularly does not contain any halogenated flame retardant substances. Fasatan® TFS therefore is registered in the PRONOTA Positive List for Building Products and is suited to be used for DGNB® (Deutsche Gesellschaft für Nachhaltiges Bauen e. V.) – certified buildings.



Fasatan® TFS is free of solvent, isocyanate, silicon and PCP and exhibits an extremely low shrinkage.

Fasatan® TFS is paint compatible in compliance with DIN 52 452, part 4. However, because of the large number of paint colours own tests should be carried out.

Fasatan® TFS is tested quality in compliance with DIN 4102, part 1 and corresponds to the building material class normally inflammable (DIN 4102-B2), when our construction sealing foils Fasatan®, Fasatyl® and Fasatan® eco are adhered to metals, wood, or solid mineral subsurfaces with Fasatan® TFS.

Fasatan® TFS is suitable for internal and external elastic bonding:

- for the bonding of our construction sealing membranes Fasatan® and Fasatyl®
- for the bonding of rebates, mitres and overlaps
- for internal and external joint sealing
- for bonding of construction components made from plaster, natural stone, aluminium, steel, zinc, copper, glass, wood, MDF, tiles, ceramic among each other or on solid mineral subsurfaces

Fasatan® TFS is a flexible, single-component adhesive sealant. Fasatan® TFS is resistant to overnight condensation and cures with atmospheric moisture to a flexible, rubbery plastic. This has excellent weather and chemical resistance.

### FASATAN® TFS offers the following advantages:

- very rapid and secure working
- is free of solvent and neutral in odour
- is resistant to overnight condensation
- offers a wide spectrum of adhesion to concrete, aluminium blank and powder coated, unplasticised PVC, wood as well as many other normal building materials
- good adhesion force also on many solvent sensitive subsurfaces as polystyrene foams, e. g. XPS and EPS
- processing possible from – 5 °C on under destined conditions
- single-sided adhesive application
- no pre-treatment of the membrane
- no flash time, no additional risk of contamination
- self-levelling, unproblematic application to uneven foundations (cavities in concrete)
- adjustment possibilities for laminate up to 30 minutes after adhesion
- possesses excellent weather, UV and chemical resistance
- harmonised to building conditions
- long-lasting adhesion and sealing
- causes no blister formation
- has low shrinkage
- is elastic

### Technical data:

Basis	silane terminated polymer, neutral cross-linking	
Colour	black	
Curing system	atmospheric humidity	
Transfer rate	> 100 g / min	DIN 52 456 – 6 mm
Spec. weight	approx. 1.5 g / cm <sup>3</sup>	DIN 52 451 – PY
Skin formation time	approx. 1 h	+ 23°C / 50 % r. h.
Curing	approx. 2 mm / 24 h	+ 23°C / 50 % r. h.
Volume change	< - 3 %	DIN 52 451 – PY
Stress-strain value at 100 %	approx. 0.4 N / mm <sup>2</sup>	DIN 52 455 NWT – 1 - A2 – 100
Tensile strength (film)	approx. 1.0 N / mm <sup>2</sup>	DIN 53 504
Shore A hardness	approx. 25	DIN 53 505, 4 weeks + 23°C / 50 % r. h.
Permissible net deformation	25 %	
Temperature resistance	- 40 °C to + 80 °C	
Processing temperature	+ 5 °C to + 40 °C (building element temperature)	
	from - 5 °C building element temperature	verification by certificate from MPA
	under destined conditions	Dortmund
Delivery form	600 ml tubular bag, 20 tubular bags / cardboard box	

### Processing notes:

#### Material consumption:

Depending on underground about 10 m per 600 ml tubular bag, nozzle diameter 8mm.

At 1 mm layer thickness of the adhesive the consumption is approx. 1 l / m<sup>2</sup>, i.e. a 600 ml tubular bag suffices for approx. 0.6 m<sup>2</sup> adhesion surface.

The internal seal must be more vapour diffusion tight than the outer seal. Therefore Fasatan® must be used for the outer seal and Fasatyl® for the inner seal.

Care must be taken during sealing that the joint space is first well insulated with suitable material (mineral wool or other) to avoid heat bridges and undershooting the dew point on the inside.

#### Preparation of the adhesion surface:

The adhesion surfaces must be firm, load-bearing, clean and free of grease, oil and dust. Any release agent present must be removed. In case of processing temperatures (building element temperatures) from + 5 °C to + 40 °C, the foundations may be slightly damp but visible or standing water is definitely to be avoided. In case of processing temperatures (building element temperatures) from - 5 °C to + 5 °C, water and moisture in every possible form, especially also as ice or frost, is to be avoided. All foundation materials must be compatible with Fasatan® TFS within the context of DIN 52 452, part 1. Adhesion and compatibility with plastics should be object-related tested. In the use on coated foundations (e.g. facades made hydrophobic) a pre-test for compatibility is necessary. Thus with, for example, acrylic coating materials a loss of adhesion is possible through plasticiser migration.

#### Procedure:

The temperature (building element temperature) must not fall below - 5 °C. At temperatures of below + 5 °C, curing time of Fasatan TFS may increase gravely, depending on humidity.

Depending on the material and surface properties priming of the foundation is recommended. Depending upon the working conditions and foundation our Multi Primer can be used. Compatibility with the surface must be tested in each individual case. Multi Primer is solvent based.

Fasatan® TFS is suited for the connection of Fasatan® and Fasatyl® to on site present bituminous membranes. These bituminous membranes have to be applied correct in compliance with appropriate technical rules, in particular they have to be dry, firm, load-bearing, clean and free of grease, oil and dust.

Fasatan® and Fasatyl® have to overlap the bituminous membranes for at least 10 cm and have to be adhered holohedral to the subsurface. Additionally the marginal edge of Fasatan® and Fasatyl® has to be fastened mechanically to the foundation with aluminium joint connection rails.

Particularly in case of connection to areas with contact to soil is to be observed, that Fasatan® and Fasatyl® are attached in a loop and in no case with tension.

In case of this application, we recommend a thorough suitability test on original materials before every use

#### Tools:

The following tools are adequate to ensure secure and unproblematic mounting: cartridge gun, protective gloves, carpet knife, large and small spatulas and pressure roller.

### Mounting:

Apply Fasatan® TFS with the cartridge gun and nozzle onto the foundation in a continuous bead (nozzle diameter at least 8 mm). Spread the bead with a spatula.

Depending upon the width of the membrane an adhesive width of 4 – 5 cm and a thickness of 1 mm is sufficient at the building structure, on the element width of 3 cm and thickness of 1 mm is sufficient. At least 10 cm overlap should be maintained with membrane overlap.

Attach Fasatan® or Fasatyl® in a loop. Lay the membrane onto the fresh adhesive bed and apply an even pressure (e.g. with a pressure roller). After attachment of the membrane the adhesive joint should be at least 1 mm in thickness and fully filled with adhesive without air bubbles.

Finally the membrane edges are bedded into excess adhesive with a spatula. In horizontal regions apply adhesive to the membrane edge with a spatula as additional seal.

Open containers should be used as soon as possible.

During processing and curing time avoid contact to alcohol, hydrocarbons, cleaners and solvents.

### Cleaning:

Contamination by non-cured adhesive can be removed with Fasatan® cleaner / thinner. Fasatan® cleaner / thinner can also be used to degrease the adhesion surfaces – test compatibility!

Whenever working is done with Fasatan® cleaner / thinner the compatibility has to be tested.

When set, Fasatan® TFS can only be removed mechanically.

### Storage:

Store in unopened original packing, cool and dry between + 5 °C and + 25 °C.

Can be stored at least 9 months from date of producing on in unopened original packing.

Please obtain further information from our current safety data sheet.

### Attention! Important Note:

Above information are based on best present knowledge of current technology, but do not guarantee faultless processing of our products. The information is based on practical results of our tests, but is not binding and does not constitute warranties of characteristics in terms of Federal Supreme Court jurisdiction. Our information does not constitute a legally binding assurance of certain properties or suitability for a specific purpose. Supplementary information by our specialists are merely recommendations, for which no liability is accepted.

Due to the many possible applications of our products, we recommend subjecting the project to a thorough suitability test on original materials before release for further application.

Since our information are non-binding we do not warranty their correctness. For this reason we accept no liability for possible improper processing based on information submitted by our employees.

This technical data sheet replaces all previous versions and is valid until a new version is issued, or until Dec. 31, 2014. Please request the latest version after Jan. 01, 2015.

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