



#### Revision: 01/03/2018

## Page 1 from 5

#### Technical data:

Basis	Polyurethane Foam
Consistency	Liquid
Curing system	Moisture curing
Skin formation (20°C and 60% R.H.)*	8 min
Curing time (20°C and 60% R.H.)*	40 min
Burdening after (20°C and 60% R.V.)*	After 1h
Yield	Up to 2000m / canister (Joint 10 mm x 10 mm)
Temperature resistance **	From -40°C to +90°C (for cured product)
Colour **	Black
Thermal Conductivity ** (EN 12667)	Ca. 0,036 W/m.K
Shear Strength ** (DIN 53427)	0,12 N/mm²
Tensile Strength ** (DIN EN 1607)	0,18 N/mm <sup>2</sup>
Flexural Strength ** (DIN 5342)	0,6 N/mm²
Compression Strength ** (ISO 844)	0,3 N/mm <sup>2</sup>

\* 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

Soudatherm SFI 600P is a polyurethane foam sealant/adhesive in canister format for the efficient, clean, economical and durable filling of the joint between the glass and the frame of a window. The foam can be applied efficiently and quickly with an adjustable gun system.

### Properties

- Enhances the airtightness of windows (EN 1026/EN12207)
- Improves Uf values of windows thanks its very low thermal conductivity: 0.036W/m.K The foam is a good acoustic insulator
- Enhances the mechanical stabilisation of the window thanks to its excellent adhesive properties
- Economical consumption: can be dosed and applied exactly as required, thanks to its low expansion characteristics and the use of the Soudatherm applicator Gun. One canister of Soudatherm SFI 600P can fill up to 2000m of a standard joint of 10 x 10 mm (When using the Soudatherm Applicator Gun)
- Extreme time saving: up to 50% faster to apply than a traditional sealant or a foam strip

- Open time: Max 8 min. (depends on temperature and relative humidity)
- Fast curing compared to traditional sealant: burdening after 1 hour when moistened
- Resistant to ageing (but not UV resistant)
- No flammable propellants: avoids the risk of fire at the working place
- Free of solvents
- Flexible once cured, not brittle
- Easy to cut in case glass has to be removed and/or replaced
- Can be used with surface temperatures from +5°C.

Product temperature needs to be at least +10°C.

Optimal yield and extrudability with a product temperature above 15°C

### Applications

Filling of the joints between the glass and the frame of a window (rebate) to enhance airtightness, thermal characteristics and mechanical stability of all types of windows (aluminium, (U)PVC and wood or combined).

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Page 2 from 5

# Revision: 01/03/2018 Application method

- The materials should be clean and free of dust and grease. Loose parts should be removed.
- The gap is ideally filled for 70 %.
- While filling the joint, keep in mind that you do not fill the joint completely up to the front of the profile. You need some space behind the foam to clear the drain and ventilation holes
- The glazing beads should be mounted immediately after filling the joint in order to push the glass against the outside rubber seals in case of PVC or aluminium windows (which will impeded if the foam has already cured).
- In a wooden window with small joint width it is advisable to use the narrow nozzle, however keep in mind that while using the narrow nozzle, there will be slightly more expansion.
- It is highly recommended to moisten the joint area prior to the application of Soudatherm SFI 600P. This will provide the moisture curing product with the necessary moisture. Cell structure and foam stability will benefit significantly and thus all properties such as thermal and acoustical insulation, as well as airtightness. Curing times we be reduced dramatically.

This procedure certainly applies to PVC and Alu-windows, even if ventilation or drain holes might locally provide extra air/humidity. In wooden windows this is less critical thanks to residual humidity.

In all cases, before starting work on the production line or in the workshop it is recommended to check the conditions of temperature and relative humidity and check the type of profile. In all cases it is recommended to do a preliminary curing test.

### Cleaning

- Fresh foam should be removed with Swipex
- Cured adhesive should be removed mechanically and/or with Soudal PU-Remover

### Application temperature

- Surface temperature: From +5 °C to +35 °C
- Ambient temperature: From +5 °C to +35 °C
- Canister temperature: From +10 °C to +35 °C (Optimal above +15 °C)

## Packaging

Colour: Black Packaging: Canisters of 10,4 kg (net weight)

#### Shelf life

18 months in the unopened packaging in a dry location (with a storage temperature from  $5^{\circ}$ C to  $25^{\circ}$ C)

After application, just lock the gun. Gun and canister can be kept under pressure for 2 weeks without risk of curing.

#### Safety recommendations

- Observe the standard industrial hygiene procedures.
- Wear protective goggles and gloves.
- Remove cured adhesive mechanically, never remove with a flame.
- For further information on product safety and handling, refer to the information on the container.

### Compatibility

- Compatible with Thiover/Butylver and Hotver/Butylver (Tested by Fenzi according to IFT ROSENHEIM RICHTLINIE DI-01/01)
- Compatible with IGK 511 (Butyl, primary sealant) and IGK 130 secondary sealant (2K PU)
- Remark: given the considerable amount of material on which we can apply Soudatherm SFI 600P and the chemical variables possible in the materials of contact, it is recommended however, to do a preliminary compatibility test.

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Revision: 01/03/2018

Page 3 from 5

#### Working and cleaning method

First time use or new canister:

- 1. Close the Applicator Gun
  - The Applicator Gun has to be locked before being connected to the canister
  - The screw at the back of the gun has to be closed completely, by turning clockwise
- 2. Connect hose to the canister
  - Close valve at the end of the hose
  - Close valve at the top of the canister (by turning clockwise)
  - Connect the hose to the canister manually
  - Then tighten the hose to the canister with a wrench or spanner until firmly closed

#### When starting work:

- 3. Clean the tip of the gun
  - Check the nozzle for cured product
  - If there is any cured product blocking the nozzle, remove it mechanically
  - The Applicator Gun needle has to be completely visible
- 4. Gun and nozzle preparation
  - Soudatherm SFI 600P Gun and Multi Gun can also be closed and reopened without touching the adjusting screw at the back; pull the knob next to the trigger down to close, push back (upwards) to reopen. This special knob allows reuse after a break with the same settings.
  - Normal Gun is designed to be used without nozzles. Multi Gun can be used without nozzle or with a (cut back) silicone nozzle (PVC and Alu) or the special conical nozzle (wooden windows).



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### Revision: 01/03/2018

5. Shake canister

- Canister should be shaken thoroughly for 30 seconds in order to mix the components of Soudatherm SFI 600P completely
- This assures an optimal adhesive quality and extrudability
- Repeat this action on a regular basis during use of Soudatherm SFI 600P to maintain a consistent quality

#### 6. Open the valves

- Open the valve on top of the canister by turning anti-clockwise
- Open the valve at the end of the hose

7a. Optional: Place canister in Soudatherm Backpack and buckle up

- The canister is best carried in the specially designed backpack
- The canister can be fixed with the safety buckle
- The position on the back can be adjusted with the straps of the backpack for optimal comfort

7b. Optional: Place canister in Soudatherm Trolley

- The foam can be applied by a single person
- Extremely fast and efficient application
- 8. Moisten the joints
  - Moisten the joints by using a plant spray
  - Ensure that on non-porous surfaces no large water droplets are present
- 9. Apply foam
  - Open the black screw at the back of the gun until the beads have the desired shape when pulling the trigger
  - We advise a preliminary test is undertaken into in a cardboard box or another container in order to obtain the correct setting of the gun
  - The joints should have a uniform black colour
  - While filling the joint, the foam needs to have contact with both the glass and the frame



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Everdongenlaan 18 - 20 Fax: +32 (0)14-42.65.14 Page 4 from 5





Page 5 from 5

10. Application interruption

Revision: 01/03/2018

- During any short-term interruption to application, the Soudatherm Applicator Gun can be locked by a switch at the trigger.
- For safety reasons during a longer interruption of several hours, for example during transport, we advise closing the valve on the canister as well.
- After transport, the valve on the canister should be re-opened to keep the pressure within the system and to prevent the adhesive curing internally
- The system can be stored like this for a time span of up to 2 weeks. If the storage period, without use, is longer than 2 weeks, we advise that the system is cleaned completely
- Storing the gun/hose longer than 2 weeks without cleaning increases the risk of cured adhesive inside the hose. In that case there will be a pressure drop while extruding Soudatherm SFI 600P. The use of replacement gun/hose will be advisable to proceed under good conditions.
- 11. Changing the canister
  - Make sure the canister is completely empty
  - Close off the valve on the canister (by turning clockwise)
  - Close off the valve at the end of the hose
  - Detach the hose from canister
  - Shake the new canister thoroughly for 30 seconds
  - Clean the valve of the hose and the valve of the canister with Soudal Gun & Foam Cleaner
  - Connect the hose to the new canister see operation 3
- 12. Cleaning the gun and hose
  - Close off the valve on the canister (by turning clockwise)
  - Close off the valve at the end of the hose
  - Detach the hose from canister
  - Clean the valve of the hose and the valve of the canister with Soudal Gun & Foam Cleaner
  - Attach the cleaning adaptor to the hose manually
  - Then tighten with wrench or spanner until firmly closed
  - Attach Soudal Gun & Foam Cleaner to the Cleaning Adaptor and flush the system completely
  - Detach Soudal Gun & Foam Cleaner immediately after the cleaning session
  - Make sure no cleaning agent remains in the hose and gun after the session

#### 13. Disposal

- The canister is a disposable container, and is not suitable for reuse or refill
- To be in suitable condition for disposal the canister needs to be completely empty and depressurized. If necessary, the canister should be re-shaken and the valve carefully opened above a waste container to remove any residual pressure and/or product
- The empty canister should be perforated through the weak spot
- The perforated canister can then be disposed of, as ordinary scrap metal

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