



# TYTAN PROFESSIONAL Window & Door Insulating Foam Sealant 9oz

TYTAN PROFESSIONAL Window & Door is specifically formulated for filling, insulating, and sealing around windows and doors. Innovative low pressure and expansion formula eliminates warping or bowing of frames, and provides a full cavity fill. Conforms to the shape of all cavities forming a permanent, airtight, and waterproof seal on wood, metal, masonry, glass, and most plastics. It stops air infiltration and, in turn, prevents heat loss and drafts. TYTAN PROFESSIONAL Window & Door is environmentally friendly, contains no CFC's or HCFC's, and it is UL Classified.

## FEATURES

- Expands to fill gap without bending, warping, or bowing window and door frames.
- Professional low pressure, low expansion formula to fill, seal, and insulate between window and door frames and their rough openings.
- AAMA Verified Component - Exceeds AAMA 812 Requirements.
- All-Direction Dispensing - More Comfortable Application in Places that are Hard to Reach.
- Bonds and seals to common construction materials: wood, concrete, plaster, etc. controllable, quick, and efficient application.
- Repels and blocks moisture.
- Durable airtight seal - bonds, stops heat loss, and air infiltration.
- High long term insulation value - increases energy efficiency.
- Easier to transport and use than fiberglass.
- Shelf life 18 months.



## APPLICATIONS

++ FILLING FREE SPACES, CRACKS, GAPS, PIPE PENETRATIONS
++ SEALING ROOF, WALL AND FLOOR JOINTS
+ SEALING FOR WINDOW FITTING
+ SEALING FOR DOOR FITTING
+ THERMAL INSULATION
+ ACOUSTIC INSULATION
+++ foam dedicated/recommended for this application; ++ foam suitable for this application; + foam meeting basic requirements; - not suitable for this

## BENEFITS

▼▼▼ FOAM VOLUME INCREASE (POSTEXPANSION)
- FOAM MULTIPositionING
■ FOAM YIELD
■ FOAM PRESSURE
■ FOAM FLAMMABILITY
■ FOAM ADHESION TO SURFACE
▲▲▲ high; ▲▲ increased; ■ normal; ▼▼ decreased; ▼▼▼ low; - no application



application

## APPLICATION CONDITIONS

Can/ applicator temperature [°C] (optimal +20°C)	50°F ÷ 86°F +10°C ÷ +30°C
Ambient/ surface temperature [°C]	32°F ÷ 86°F 0°C ÷ +30°C

## DIRECTIONS FOR USE

Prior to application, read safety instruction presented at the end of TDS and in MSDS.

### 1. SURFACE PREPARATION

The foam presents ideal adhesion to typical construction materials, such as: brick, concrete, plaster work, wood, metals, styrofoam, hard PVC and rigid PUR.

- Working surface should be cleaned and degreased.
- The surface can be sprinkle with water at application temperature above 0°C.
- Secure surfaces exposed to accidental foam contamination.

### 2. PRODUCT PREPARATION

- Too cold can should be brought to room temperature, e.g. by immersion in warm water with temperature up to 86°F (+30°C) or leaving it in room temperature for at least 24 h.

### 3. APPLICATION

- Put on protective gloves.
- Vigorously shake the can (10-20 seconds, the valve facing down) to thoroughly mix the components.
- Screw the can onto the applicator.
- Working position of the can is “valve facing down”.
- Vertical gaps should be filled with foam starting at the bottom and moving up.
- Do not fill the entire gap – the foam will increase in volume.
- In case of sealing the open woodwork, gaps >1,18 in (3 cm) are not recommended. Gaps >1,97 in (5cm) are unacceptable. Slots wider than 1,18 in (3 cm) from the bottom to fill up from one wall to the other alternately forming a zigzag pattern.
- Should application be interrupted for more than 5 minutes, the applicator nozzle with fresh foam should be cleaned with polyurethane foam cleaner and the can should be shaken prior to application.
- In case of foam drying in the applicator, the applicator tip should be cut off, which enables resuming work with foam.

### 4. WORKS AFTER COMPLETION OF APPLICATION

- Immediately after full foam hardening, it should be secured against exposure to UV rays by using e.g. plaster or paints, acrylic, silicon.
- If the foam is not fully used up, after completion of work the applicator and valve should be cleaned with polyurethane foam cleaner.

## 5. REMARKS / RESTRICTIONS

DOOR AND WINDOWS FITTING WITHOUT USING MECHANICAL COUPLING IS FORBIDDEN. LACK OF MECHANICAL COUPLINGS MAY CAUSE DEFORMATION OF THE MOUNTED ELEMENT.

- The curing process is dependent on temperature and humidity. The decrease in ambient temperature within 24 h after the application below the minimum application temperature can affect the quality and / or correctness of the seal.
- Hurried attempts at preliminary treatment may cause irreversible changes in foam structure and its stability and may affect deterioration of foam utility parameters.
- The foam displays lack of adhesion to polyethylene, polypropylene, polyamide, silicone and Teflon.
- Fresh foam should be removed with polyurethane foam cleaner.
- Hardened foam may only be removed mechanically (e.g. with a knife).
- Quality and technical condition of used applicator affect the parameters of final product.
- The foam should not be used in spaces without access of fresh air and poorly ventilated or in places exposed to direct sunlight.
- The manufacturer recommends using strip foam once (at one go), because in case of foam drying in the applicator, the future use may be impossible.

## TECHNICAL DATA

Color	
yellow	+

Parameter (+23°C/50% RH) <sup>1)</sup>	Value
Nominal value [oz]	9
Capacity (free foaming) [l] (RB024)	9 - 11
Capacity (free foaming) cu [ft]	0,30 - 0,38
Capacity (free foaming) 1/2" [ft]	222
Capacity (free foaming) 3/8" [ft]	396
Capacity (free foaming) 1/4" [ft]	890
Capacity in gap [l] (RB024) <sup>2)</sup>	9 - 10
Capacity in gap cu [ft]	0,30 - 0,34
Secondary increase in volume (post-expansion) (TM1010-2012**)	100 - 130
Tack-free time [min] (TM 1014-2013**)	≤ 10
Cutting time [min] (TM 1005-2013**) <sup>3)</sup>	≤ 60
Full cure time [h] (RB024)	24
Heat conductivity coefficient (λ) [W/m*K] (RB024)	≤ 0,036
Dimensional stability [%] (TM 1004-2013**)	≤ 5
Flammability class (DIN 4102)	B3
Flammability class (EN 13501-1:2008)	F
R Value [per inch]	4 - 5

1) All given parameters are based on laboratory tests compliant with internal manufacturer's standards and strongly depend on foam hardening conditions (ca, ambient, surface temperature, quality of used equipment and skills of person applying the foam).

2) The value given for a gap with dimensions 30\*100\*35 (width \*length \*depth [mm]).

3) The manufacturer recommends to commence finishing works after full hardening is completed, i.e. after 24 h. The result given for a foam strip of 3 cm diameter.



\*\*Producer uses test methods approved by FEICA designed to deliver transparent and reproducible test results, ensuring customers have an accurate representation of product performance. FEICA OCF test methods are available at: <http://www.feica.com/our-industry/pu-foam-technology-ocf>. FEICA is a multinational association representing the European adhesive and sealant industry, including one-component foam manufacturers. Further information at: [www.feica.eu](http://www.feica.eu)

## TRANSPORT / STORAGE

Transport temperature	Foam transport period [days]
< -20°C	4
-19°C ÷ -10°C	7
-9°C ÷ 0°C	10

The foam maintains its usability within 18 months from manufacturing date, provided that it is stored in original packaging in vertical position (valve facing up) in a dry place in temperature +5°C do +30°C. Storage in temperature exceeding +30°C shortens the shelf life of the product, adversely affecting its parameters. The product may be stored in temperature -5°C, no longer however than for 7 days (excluding transport). Storage of foam cans in temperature exceeding +50°C or in vicinity of open flame is not allowed. Storage of the product in a position other than recommended may result in jamming the valve. The can cannot be squeezed or pierced even when it is empty. Do not store the foam in the passenger compartment. Transported only in the trunk.

**Detailed transport information is included in the Material Safety Data Sheet (MSDS).**

The information contained herein is offered in good faith based on Producer's research and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information shall not be used in substitution for customer's tests to ensure that Producer's products are fully satisfactory for your specific applications. Producer's sole warranty is that the product will meet its current sales specifications. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. Producer specifically disclaims any other expressed or implied warranty of fitness for a particular purpose or merchantability. Producer disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.