

# Tytan Professional THERMOSPRAY Thermo-Acoustic PU GUN Insulation 870 ml

The one-component polyurethane foam cures under the influence of humidity contained in the air and is characterized by a homogeneous, fine-cellular structure, designed for spraying application. The foam is produced in a plant with the Quality Management System ISO 9001:2008 implemented.

## APPLICATIONS

|  |
|--|
| +++ THERMAL AND ACOUSTIC INSULATION OF LARGE SURFACES  |
| +++ THERMAL AND ACOUSTIC INSULATION OF INTERNAL AND EXTERNAL BUILDING PARTITION WALLS  |
| +++ THERMAL INSULATION OF UNEVEN SURFACES WITH COMPLICATED SHAPES AND IN HARD TO REACH PLACES  |
| ++ THERMAL AND ACOUSTIC INSULATION OF ATTICS (WALLS AND SLANTS)  |
| +++ THERMAL AND ACOUSTIC INSULATION OF METAL GARAGES, GARDEN SHEDS, BALCONIES  |
| ++ THERMAL AND ACOUSTIC INSULATION OF CABLES AND PIPE DUCTS  |
| ++ THERMAL INSULATION OF TANKS, BASINS, GULLIES  |
| ++ THERMAL INSULATION OF SKELTON-TYPE BUILDINGS  |
| ++ REDUCTION OF THERMAL BRIDGES  |
| +++ foam dedicated/recommended for this application; ++ foam suitable for this application; + foam meeting basic requirements; - not suitable for this application |

## BENEFITS

|   |
|---|
| ■ FOAM YIELD  |
| ■ FOAM VOLUME INCREASE (POSTEXPANSION)                                    |
| ▲▲ FOAM ADHESION TO SURFACE   |
| ▲▲▲ CONDUCTIVITY (LOW THERMAL INSULATION)                                 |
| ▼▼ FOAM PRESSURE  |
| ▼▼ FOAM FLAMMABILITY  |
| - MULTIPOSITIONING  |
| ▲▲▲ high; ▲▲ increased; ■ normal; ▼▼ decreased; ▼▼▼ low; - no application |

## SUBSTRATES

|                                 |            |
|---------------------------------|------------|
| +++ WOOD                        | ++ METAL   |
| +++ CERAMICS                    | ++ GLASS   |
| +++ STEEL                       | ++ PLASTIC |
| +++ STYROFOAM                   | ++ BRICK   |
| - CONCRETE                      | ++ PLASTER |
| +++ INSULATING AERATED CONCRETE | AND OTHER  |



## APPLICATION CONDITIONS

|   |           |
|---|-----------|
| Can/ applicator temperature [°C]<br>(optimal +20°C) | +15 - +30 |
| Ambient/ surface temperature [°C]                   | +5 - +30  |

## DIRECTIONS FOR USE

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

### 1. SURFACE PREPARATION

- Working surface should be cleaned and degreased.
- Secure surfaces exposed to accidental foam contamination.
- Before applying the product, moisten porous building materials gently with water using e.g. a garden sprayer.

### 2. PRODUCT PREPARATION

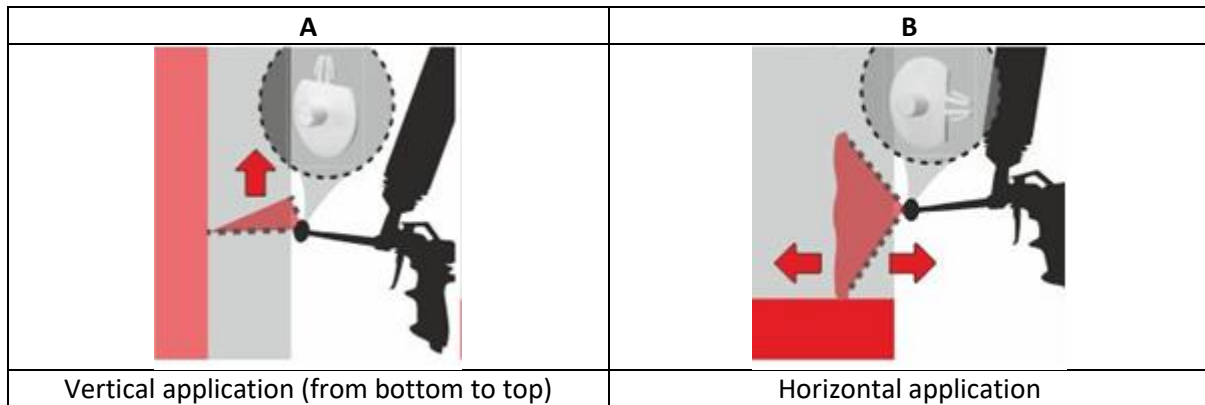
- Too cold can should be brought to room temperature, e.g. by immersion in warm water with temperature up to +30°C or leaving it in room temperature for at least 24 h.
- Applicator temperature cannot be lower than can temperature.

#### Note!

**Due to possible dusting, the personal protective equipment should be used during application, i.e. working clothes (overall), gloves, masks, glasses.**

### 3. APPLICATION

- The correct use of the product is only possible through the a nozzle applicator supplied with each product. Lack of an applicator makes it impossible to apply the product.
- 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".
- Mount the red spray nozzle applicator supplied with the product on the tip of the spray gun by pressing it until it stops.
- Before the application, set the spray nozzle to the required position by rotating the entire applicator. Position A allows spraying perpendicular to the ground "down-up", Position B allows spraying parallel to the ground "left-right":



- Open the full flow of the product through the gun by unscrewing the screw regulating the opening of the pass as much as possible and fully pressing the trigger.
- Spray the foam from a distance of approx. 30 cm from the insulated surface by moving the gun slowly (depending on the nozzle setting “right-left” or “down-up”) in order to form an even layer of the product to be sprayed.
- Increasing the distance, from which spraying is carried out will widen the applied layer and at the same time reduce its thickness.
- The maximum recommended application distance is 50 cm.
- Spray the insulation layer in bands one next to another without overlapping.
- One layer of insulation will grow to a thickness of approx. 2-3 cm (depending on the gun speed). In order to obtain higher insulation thickness, apply subsequent layers after hardening of the previous layer, not earlier than 30 minutes after its application.
- Do not apply more than 4 cm of fresh product at any one time.
- Moisten each layer gently with water.
- The number of layers applied in this way should not exceed 5.
- 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.
- During application, clean the spray gun if foam residue accumulates on it. The foam that accumulates on the applicator blocks spraying (uneven application).
- For best comfort, use the can at room temperature. If the can is too cold, heat it up. Note! Avoid overheating the can above +30 °C.

#### 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.
- Clean the gun thoroughly at the end of work. To do this, screw the cleaner can onto the gun and press the trigger until a clean liquid flows out of the gun. The spraying tip is designed for single use.

#### 5. REMARKS / RESTRICTIONS

- 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).
- Do not use the product on sparking surfaces that cause electric charge.
- The presence of open fire is unacceptable..
- Do not use foam in rooms without access to fresh air and poorly ventilated, as well as in places exposed to direct sunlight and wind.

## TECHNICAL DATA

| Color  |   |
|--------|---|
| yellow | + |

| Parameter (+23°C/50% RH) <sup>1)</sup>                      | Value                                |
|---|--------------------------------------|
| Capacity (surface coverage) [m <sup>2</sup> ]               | ~ 1,0 (5cm layer); > 2,0 (3cm layer) |
| Full cure time [h] (RB024)                                  | 24                                   |
| Heat conductivity coefficient ( $\lambda$ ) [W/m*K] (RB024) | 0,036                                |
| Flammability class (DIN 4102)                               | B1                                   |
| Increase [%]  | 20 - 40                              |
| Curing time of one layer [min]                              | 30                                   |
| Adhesion to surfaces: [kPa] [RB024]*                        |                                      |
| - wood  | ≥80                                  |
| - ceramics  | ≥110                                 |
| - steel   | ≥70                                  |
| - styrofoam   | ≥80                                  |
| - concrete  | ≥80                                  |
| - insulating Aerated Concrete                               | ≥100                                 |

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).

\*The value given for a gap with width 20 mm.

## 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 12 months from manufacturing date, provided that it is stored in original packaging in vertical position (valve facing up) in a dry place in temperature

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+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).**

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