



Den Braven

PU Thermo Adhesive B1

Professional ETA004:2000 certified B1 adhesive foam for external insulation facade systems



PRODUCT DESCRIPTION

Zwaluw PU Thermo Adhesive B1 is a moisture-curing one component low-expansion polyurethane adhesive for bonding and installation of façade insulation boards (EWI/EIFS). Zwaluw PU Thermo Adhesive B1 cannot be dissolved after curing. It is waterproof, rot proof, permanently elastic and can be plastered. Zwaluw PU Thermo Adhesive B1 has a very good structure and excellent adhesion from +5°C. Zwaluw PU Thermo Adhesive B1 is part of the product portfolio Sustainable Airtight Building Solutions. These products are tested on thermal insulation, resistance to driving rain and air loss. Correctly applied these products can contribute to energy savings of a building and therefore can come into close proximity with concepts such as passive house and energy neutral houses.

KEY BENEFITS

- B1, thus for use above 10 meters
- Efficient bonding of façade insulation panels
- Reduces labour time
- No water and mixing on building site
- No need for electricity
- Reduces storage space on building site
- Environmentally friendlier than traditional cement mortars

APPLICATIONS

Zwaluw PU Thermo Adhesive B1 can be used for highly efficient bonding and assembly of polystyrene (EPS, EPS-P, XPS etc.) rigid polyurethane foam (PUR/PIR) and mineral fibre panels to concrete, plaster and masonry, as well as for filling joints between the insulation boards.

DIRECTION FOR USE

- Canister temperature: +5°C to +30°C (recommended +15°C to +25°C)
- Application temperature (applies to environment and substrates): -15°C to +35°C (recommended +15°C to +25°C)
 - Hold the canister with the valve turned upwards and affix an applicator gun with NBS-thread to the canister. We recommend a NBS

Gold (see instructions in the gun box). Shake the canister vigorously prior to use at least 20 times. Turn canister upside down and apply the foam. To regulate the flow of the foam, loosen the valve at the back of the handle. Fill the cavity for 70%, in case of low humidity, lightly spray the foam with water. The foam will expand to fill the rest. When fixing window frames, use spacers and wedges to hold the frame in place for approximately 24 hours until the foam is fully cured. Protect eyes, wear gloves and protective gear. Floor-covering and furniture to be covered with paper or plastic foil. Joints wider and deeper than 4 cm should be filled in multiple layers. Wait 15-30 minutes between applications. Before each application lightly spray with water. Only use in well ventilated areas. Store canister upright between +5°C and +25°C. Pressurized container! Protect from sunlight and do not expose to temperatures exceeding + 50°C. Do not pierce or burn, even after use. Contains flammable propellants. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition. No smoking. For more information see Technical Bulletins in the Knowledge Base on our website www.denbraven.com.

TECHNICAL SPECIFICATIONS

Application Temperature	+5°C to +35°C
Base	Polyurethane
Curing Time	80-100 minutes
Density	15-25 kg/m3
Temperature Resistance	-40°C to +90°C

These are typical values

LIMITATIONS

- Not suitable for permanent water load. Not suitable for use (eg filling) in cavities with insufficient moisture, Not suitable for PE, PP, PC, PMMA, PTFE, soft plastics, neoprene and bituminous substrates

SURFACE PREPARATIONS AND FINISHING

Surfaces must be clean, free of oil and grease. Surfaces moistened slightly (spray) using a spray bottle. In cold temperatures, leave the foam to warm to room temperature for at least one hour before use. Screw the can onto a pistol with NBS thread. Shake the can vigorously before use (at least 30 times). Protect eyes, wear gloves and protective gear. Floor-covering and furniture to be covered with paper or plastic foil. Fresh product can be removed directly with Universal PU-Cleaner. After curing surplus foam can be removed with a knife or spatula and the surface can be finished. Bond the insulation panels by lining the plate in a continuous line with PU Thermo Adhesive B1 2-4cm from the edge. Leave no spaces. Apply at least one vertical bonding line in the middle of the plate. Attach within 2 minutes after application of foam, and bring into desired position. Any irregularity can be corrected within max. 20 minutes of bonding, depending on ambient temperature (air and substrate). Precise application is shown on the data sheet.

PAINTABILITY

Can be painted or covered with sealant/plaster when fully cured.

CLEANING

Fresh foam can be removed immediately with Zwaluw Universal PU-Cleaner. After curing surplus foam can be removed with a knife or spatula and the foam surface can be finished.

PACKAGING DESCRIPTION

- Aerosol

COLOUR

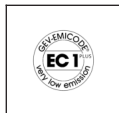
Yellow

SHELF LIFE

If kept in unopened original packaging between +5°C and +25°C and stored in a dry place, the shelf life is up to 18 months from production date. Store the canisters in an upright position.

CERTIFICATIONS

- Emicode EC1 Plus – very low emission
- EAD 040083-00-0404



HEALTH & SAFETY

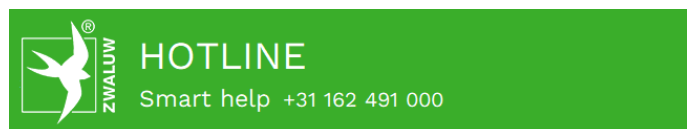
Product Safety Data Sheet must be read and understood before use. These are available on request and via our websites

WARRANTY & GUARANTEE

Bostik warrants that its product complies, within its shelf life, to its specification.

DISCLAIMER

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Awarding of licence for the use of EMICODE

Licence Number: 18503/24.04.13
For the product Zwaluw PU-Thermo Adhesive
Due to application date 21.03.2024

With reference to the classification in accordance with the directives as stipulated
in § 10 of the GEV trademark constitution

on behalf of the GEV for the above mentioned product as per § 5, section 4 of the
GEV trademark constitution is awarded the licence for the use of the GEV
trademark



This product meets with the guidelines for the criteria of use listed reverse.
The company is ordinary member of the GEV.

OM094 25.03.2024
valid until 25.03.2029

The Secretary General
Association for the Control of Emissions in Products
for Flooring Installation, Adhesives and Building Materials (GEV)
Völklinger Straße 4 · D-40219 Düsseldorf

Requirement guidelines for the awarding of the EMICODE licence

The product mentioned on the front side of the licence has to fulfil among others the following criteria in accordance with the Constitution and the guidelines of the Technical Advisory Board of the GEV:

- The product meets all the legal requirements, especially the chemical laws and their specifications.
- The product is solvent free as specified in clause 2.4 of the "GEV Classification Criteria", except if it is a surface treatment product. If the product is assigned to a GISCODE product group then this can be labelled.
- A safety data sheet (SDS) according to local law in its respectively valid version is issued for the product.
- Carcinogenic, mutagenic, reprotoxic substances of the categories 1A or 1B are not added during the manufacture of the product.
- The testing of the product is performed in accordance with the GEV Testing Method. VOC determination is performed in a test chamber followed by the Tenax / thermal desorption procedures with subsequent GC/MS analysis.
- The assignment of an EMICODE class is performed according to the following criteria and TVOC/TSVOC concentration levels. The corresponding EMICODE class shall be used to label the product:

1) Installation products, adhesives and construction products

Parameter	EC 1 ^{PLUS}	EC 1	EC 2
	max. allowed concentration [µg/m³]		
TVOC after 3 days	≤ 750	≤ 1000	≤ 3000
TVOC after 28 days	≤ 60	≤ 100	≤ 300
TSVOC after 28 days	≤ 40	≤ 50	≤ 100
R value based on German AgBB LCI (NIK) after 28 days	1	-	-
Sum of non-assessable VOC	≤ 40	-	-
Formaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Acetaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Sum of form- and acetaldehyde	≤ 0.05 ppm	≤ 0.05 ppm	≤ 0.05 ppm
Sum of volatile C1A/C1B after 3 days	≤ 10	≤ 10	≤ 10
Any volatile C1A/C1B after 28 days	≤ 1	≤ 1	≤ 1

2) Products for floor surface treatments for parquet, mineral floors and resilient floorings

Parameter	EC 1 ^{PLUS}	EC 1	EC 2
	max. allowed concentration [µg/m³]		
Sum TVOC + TSVOC after 28 days	≤ 100 thereof max. 40 SVOC	≤ 150 thereof max. 50 SVOC	≤ 450 thereof max. 100 SVOC
Formaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Acetaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Any volatile C1A/C1B after 3 days	≤ 10	≤ 10	≤ 10
Any volatile C1A/C1B after 28 days	≤ 1	≤ 1	≤ 1