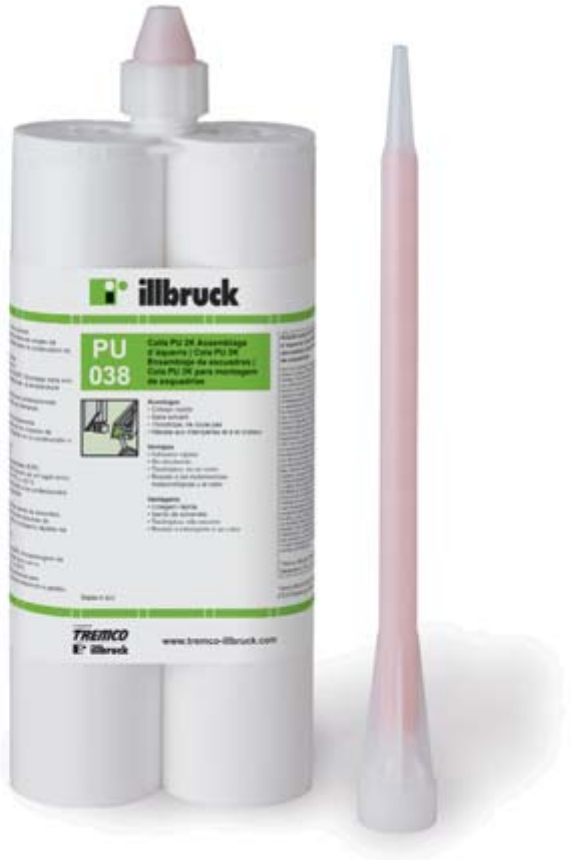
illbruck PU038

Two Component Polyurethane Adhesive

KEY BENEFITS SUMMARY

- Excellent adhesion on wide spectrum of building materials e.g. ALU, PVC, HPL
- Controlled hardening process
- Moisture independent curing convenient for tiny cavities and deep connections
- Twin cartridge design ensures easy handling
- Good water and weather resistance
- Can be abraded, over painted and powder coated
- Solvent free
- Tested by the ift-Rosenheim



PRODUCT INFORMATION

Usage/Purpose
PU038 is designed mainly for constructional bonding of windows and door frame corners. It is polyurethane based thixotropic adhesive, does not drip and does not contain any solvent. Furthermore it is suitable for gap filling applications.

Colour
Beige (after complete curing of both components)

Packaging
550 g and 900 g twin cartridge, dispatch unit of 6 pcs/box

Specification
Twin cartridge with static mixing nozzle that provides easy application and handling

Storage
9 months when stored in original, tightly closed casks, in dry conditions, out of direct sunlight between +15°C and +25°C

USAGE GUIDLINES

Application Tips
- The functional hardness time reduction of PU038 and consequently faster frame processing or installation, can be reached by adding PU038 accelerator as required.
- PU038 2C PU adhesive can be dyed to the required colour shade by adding colour pastes (white, black, blue, red, yellow).
- The adhesive changes its colour if it is exposed to the sun, but its bonding strength does not change!
- The allowance of PU038 accelerator and/or colour pastes can be effected directly after the dosage of the two components from the twin cartridge, they can, therefore, be mixed together in one mixing procedure.

Surface Preparation
Bonded interfaces must be clean, dry and free from any foreign matter contamination or finger prints prior to sealant application.
Bonding of aluminium: only on chemically pre-treated (anodized) or lacquered surfaces.
Durable and non-aging bonds of blank aluminium cannot be achieved without the corresponding pre-treatment of the surfaces to be bonded. Please refer to our technical service for detailed information about primer recommendation.

Mixing Procedure I
- The static mixing tube is screwed onto the opened adhesive cartridge. By operating the pneumatic or manual gun, the homogeneously mixed glue in the static mixing tube is directly applied onto a profile. Then, the parts are joined and afterwards, fixed/pressed together, until the functional hardness has been achieved.

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PU038

Website: www.tremco-illbruck.com

- For technical reasons, the first 20 g of mixed adhesive is not used for bonding, because of the filling technique of the cartridge!
- The pot life time is approx. 45 min at room temperature. If application is interrupted during the pot life time, fresh adhesive must be brought into the static mixing tube when application commences. One static mixing tube can be used for the full day.
- At the end of work, the used static mixing tube remains on the cartridge unit, when work commences, change the static mixing tube. Now press out the first 20 g glue and do not use it for bonding for technical reasons!

Mixing Procedure II

- The opened adhesive cartridge is inserted into the pressure pneumatic or manual gun.
- By operating the pneumatic or manual gun, both components are dosed in the right mix ratio into the mixing tray. As described above, the accelerator and/or colour paste may be added now. The components are homogeneously mixed.
- The adhesive is applied with a spatula within the pot life time a profile to be bonded. Then, the parts are joined and fixed/pressed together, until the functional hardness has been achieved.

Pot Time

Pot life is affected by substrate material, temperature, application quality, humidity and other criteria. The values shown are for guidance only and the user should check working pot life by testing this using actual applications conditions that apply to their circumstances.

Cleaning

Clean uncured PU038 with Perennator AA404 cleaner. Cured adhesive can only be removed mechanically.

TECHNICAL INFORMATION

Property	Test method	Result
Composition		2 component polyurethane reactive adhesive
Viscosity at +20°C		low viscosity, paste-like
Shore	DIN 53505	85 Shore D
Mix ratio		A : B = 1.0 : 1.0
Density by volume at +20°C	EN 542	approx. 1.45 g/cm^3
Pot time of a 100 g preparation at +20°C		approx. 60 min
Processing time (twin cartridge with static mixing tube at 20°C with tandem pneumatic applicator)		+10°C approx. 90 min +20°C approx. 45 min +30°C approx. 23 min
Functional hardness e.g. corner angle bonding at +20°C		approx. 6 h
Final setting time at +20°C (50-75% RH)		approx. 24 h. Until functional hardness is achieved in approx. 7 days
Application temperature		min. +7°C
Stress shearing strength	DIN/EN 1465	Alu/Alu (0.2 mm gap) at +20°C approx. 18.0 N/mm^2 Alu/Alu (0.2 mm gap) at +80°C approx. 9.0 N/mm^2

Accessories

Static mixing tube
Pneumatic or manual gun for 550 g or 900 g

Service

Contact Tremco illbruck for further information if required.

Health & Safety Precautions

Product Safety Data Sheets must be read and understood before use. Only for professional use by trained personnel. Observe general safety regulations when handling chemicals.

Application Process


Step 1


Step 2


Step 3


Step 4


Step 4


Step 5


Step 6

Additional Information

Our instructions for use, processing directives, product- or performance indications, as well as other technical statements are only general guidelines. They only describe the nature of our products (determined value at the production time) and their performance, but they give no guarantee in accordance with paragraph 443 of the BGB (Civil Code). Due to the variety of application purposes for each product, and due to a lot of different particular conditions (e.g. processing parameters, material properties, etc.), the user has to carry out his own individual qualifying tests. Our consultation in application technique, verbal and writing, as well as with tests, is offered free of charge and is not legally binding.