

**COSMOPUR 818**  
**1-component-polyurethane-adhesive**

APPLICATION

**COSMOPUR 818** is mainly used in the aluminium-window- and -door-construction (anodized or powder-coated) for the bonding of aluminium corner angles into the profile hollow spaces – only suitable for professional use by instructed personnel.

With **COSMOPUR 818**, the miter cut surfaces of PUR-window- and -door profiles are bonded friction-locked.

**COSMOPUR 818** is used in the wood-window- and –front door sphere, e. g. for the board gap bonding of front door cassettes, only for professional use by instructed personnel; here, good compound- and heat stability are obtained.

**COSMOPUR 818** shows an excellent adhesion on different wood- and building materials, ceramics, metals, thermo- and durosetting plastics, when the surface has been pretreated accordingly.

**COSMOPUR 818** obtains, during the wood/wood bonding, the strain group D4, according to EN 204.

TECHNICAL DATA

BASIS	1-component moisture cross-linked polyurethane, solvent-free (free from easy volatile organic compounds, boiling point <+200°C)		
COLOUR	of hardened up film transparent brown	approx.opaque-transparent approx.RAL 8025 pale brown	
FILM PROPERTY	of hardened up film		tough-elastic
VISCOSITY	at +20°C		low viscosity, paste-like
DENSITY	according to EN 542 at +20°C	approx.	1,14 g/cm³
FILM FORMATION TIME - wet	at +20°C, moistened with water, application quantity 500µm-PE/PVC	approx.	18 min
FUNCTIONAL HARDNESS	e.g. corner angle bonding at +20°C	approx.	5 h
FINAL SETTING TIME	at +20°C, 50% rel. air humidity at ~90% until total strength is achieved	approx. approx.	24 h 7 d
MINIMUM TEMPERATURE FOR APPLICATION		from	+10 °C

WORKING INSTRUCTIONS

Before the bonding of corner angles into the aluminium cover frame, the surfaces to be bonded should be cleaned with **COSMOFEN 60**. **COSMOPUR 818** is applied in a caterpillar shape directly from the cartridge into the profile. The adhesive hardens up with moisture, i.e. at bonding non-absorbent materials or materials with <8% humidity, the applied adhesive has to be sprayed with water (finely dispersed), in order to obtain a complete hardening up. Afterwards, the corner angle is slid into the hollow space of the profile, and then, the corner is sealed or fixed with a pin.

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WORKING INSTRUCTIONS

**COSMOPUR 818** swells (foams) during the setting process; that is why the bonded corner angles should be checked after approx. 1,5h, in order to clean possibly emerged glue with **COSMOFEN 60**.

- \* **Advice:** The viscosity of 1-part polyurethane adhesives is twice as high while processing at +15°C as at +25°C.
- \* The adhesive changes its colour, if it is exposed to the sun, but its bonding strength does not change !
- \* **Bonding of aluminium:** Only possible on chemically pre-treated or lacquered surfaces. Bright aluminium can only be bonded with a long-lasting aging resistance with a suitable pre-treatment of the surfaces to be bonded.
- \* Bondings of materials with different linear expansion must be evaluated regarding their long-time performance particularly when loading in application areas with changing temperatures.
- \* **Bonding of solid timber/solid timber:** the pressure should be possibly >1N/mm<sup>2</sup>.
- \* For glue joints > 2,5 mm thickness, setting-, press- and through-hardening times are clearly longer, a glue joint thickness ≥ 5 mm has to be excluded.

**Please observe the advices in the technical information  
“Wood/wood bonding in the outside area“, “Metal bonding “**

APPLICATION QUANTITY                      average    approx. 20 g/corner angle

FILM FORMATION TIMES, as well as the individual PRESS TIMES, can only be found out through own tests, as they are strongly affected by material, temperature, application quantity, humidity, and other criteria. The user should provide adequate security additions to the given approximate values.

CLEANING

The cleaning of not hardened up **COSMOPUR 818** is made with **COSMOFEN 60**.

The cleaning of hardened up **COSMOPUR 818** is usually only mechanically possible.

STORAGE

Store the original cask tightly closed, at a temperature between +15°C and +25°C, without direct solar irradiation.

Can be stored in unopened original cask for approx. 12months. During the storage time, the viscosity rises.

CASK SIZE

340g    (310ml) PE-euro cartridge, dispatch unit:20 pcs/box  
1.100g    (1.000ml) PE-euro cartridge, dispatch unit: 6 pcs/box  
Colour: brown is available on demand.

CLASSIFICATION

**Information can be taken from the safety data sheet.**

*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 in writing, as well as with tests, is offered free of charge and is not legally binding. These documents replace former issues*