

**COSMOPUR 819**  
**1-part polyurethane adhesive**

APPLICATION

**COSMOPUR 819** is a solvent-free, gap-filling and multipurpose one-part polyurethane assembly adhesive with quick reaction time and a viscous elastic glue joint.

**COSMOPUR 819** is used for the bonding of corner angles in the aluminium window construction (tested by the **ift-Rosenheim** with test report no. **50933381** of 25<sup>th</sup> April 2007 „**Examination of tensile strengths of bonded frame edges of aluminium compound profiles**“). - Only for professional use by instructed personnel.

**COSMOPUR 819** is processed in specialized companies for different kinds of applications in the stair construction and building trade, in diverse industry fields and for a lot of assembly bondings.

**COSMOPUR 819** has an excellent bonding strength on different wood- and construction materials, ceramics, metals, duro- and thermoplastics, provided the surfaces are prepared accordingly.

**COSMOPUR 819** obtains, during the wood/wood bonding, the strain group D4 according to EN 204.

TECHNICAL DATA

BASIS	1-part moisture cross-linked polyurethane, solvent-free (free from easy volatile organic compounds, boiling-point <+240 °C) VOC free acc. to the Switzerland VOC Directives		
COLOUR	of hardened up film (on request, also available in the colours grey and black)		white
FILM PROPERTY	of hardened up film		viscous elastic
VISCOSITY	at +20°C		medium viscosity, paste-like
DENSITY	according to EN 542 at +20°C	approx.	1,52 g/cm³
FILM FORMATION TIME-dry	at +20°C, 50% rel. air humidity, application quantity 500µm-PE/PVC	approx.	7 min
FILM FORMATION TIME-wet	at +20°C, moistened with water, Application quantity 500µm-PE/PVC	approx.	4 min
FUNCTIONAL HARDNESS	depending on kind of application at +20°C	from	20 min
FINAL SETTING TIME	2,5mm caterpillar-shaped adhesive, at +20°C, 50% rel. air humidity	approx.	24 h
MINIMUM TEMPERATURE FOR APPLICATION		from	+7 °C

WORKING INSTRUCTIONS

The surfaces of the substrates to be bonded must be dry and free from dust and grease. Remove possibly existing release agents. Depending on the nature of material and surface, the surfaces to be bonded are grinded; if necessary, we recommend to prime the surfaces to be bonded with **COSMOPUR-Primer**.

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WORKING INSTRUCTIONS

In the aluminium window construction, the corner angles are generally bonded into the hollow space of the profile without any additional pre-treatment.

**COSMOPUR 819** is applied in caterpillar-shape onto one of the parts to be bonded. 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.

The parts to be bonded are joined together within the FILM FORMATION TIME (after moistening max. 4min.) and, if necessary, pressed together until functional hardness has been reached.

**COSMOPUR 819** swells (foams) slightly during the setting process; fresh emerged glue can be removed with the cleaner **COSMOFEN 60**. When hardened up, **COSMOPUR 819** can be grinded and over-painted.

\* **Advice:** The processing viscosity of 1-part polyurethane adhesives is, when processing at +15°C, approximately twice as high 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 on chemically pretreated 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 >1 N/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 technical information**

**“Wood/wood bonding in the outside area“, “Metal bonding “**

APPLICATION QUANTITY      depending on supporting material      approx.      150-200 g/m<sup>2</sup>

FILM FORMATION TIME, 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. Adequate security additions to the given approximate values should be provided by the user.

CLEANING

Not hardened up **COSMOPUR 819** is cleaned with **COSMOFEN 60**. Hardened up **COSMOPUR 819** can usually only be removed mechanically.

STORAGE

Store tightly closed original casks, dry, at a temperature between +15°C and +25°C, without direct solar radiation.  
 Storability in unopened original casks: 12 months. During the storage time, the viscosity rises.

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CASK SIZE

310 ml (470g) PE euro cartridge, dispatch unit: 20 cartridges /box,  
600 ml (910g) alu/PE-tubular bag, dispatch unit: 20 bags /box  
1.000 ml (1.500g) alu-cartridge, dispatch unit: 6 cartridges /box.  
Colours: On demand, grey and black are available in diverse cask sizes; other cask sizes, e.g. drums, are also 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.*

This document replaces former issues