

## COSMOPUR K 1

### 1-part polyurethane assembly adhesive

#### APPLICATION

**COSMOPUR K 1** is a universal applicable assembly adhesive on polyurethane basis, solvent-free, gap-filling, with a particularly quick reaction time and a viscous elastic adhesive gap.

**COSMOPUR K 1** is used for different applications in window and door construction, in building trade also for fixing the supports of access floors as well as for different applications of assembly works and for professional use in different industries.

**COSMOPUR K 1** has an excellent bonding strength on different wood- and construction materials, ceramics, metals, duro- and thermoplastics, provided the surfaces are prepared accordingly.

**COSMOPUR K 1** obtains (at bonding wood/wood) the strain group D4 according to EN 204 (as confirmed by tests of the institute for window technique, ift in Rosenheim, test report no. 505 28322/1) and achieves a heat bonding strength of  $\sim 7,6 \text{ N/mm}^2$  according to WATT 91  $\sim 7,6 \text{ N/mm}^2$  (test report no. 505 28322/2).

**COSMOPUR K 1** is tested and approved (Dallas Laboratories, Texas, USA) for ASTM D-3498, ASTM C-557 and AFG-01.

#### TECHNICAL DATA

BASIS	1-part moisture cross-linked polyurethane, solvent-free (free from easy volatile organic compounds, boiling-point $< +240^\circ\text{C}$ ) VOC free acc. to the Switzerland VOC Directives		
COLOUR	of hardened up film		beige
FILM PROPERTY	of hardened up film		viscous elastic
VISCOSITY	at $+20^\circ\text{C}$		medium viscosity, paste-like
DENSITY	according to EN 542 at $+20^\circ\text{C}$	approx.	1,52 g/cm <sup>3</sup>
FILM FORMATION TIME	dry - at $+20^\circ\text{C}$ , 50% rel. air humidity, application quantity 500 $\mu\text{m}$ -PE/PVC	approx.	5 min
FILM FORMATION TIME	wet - at $+20^\circ\text{C}$ , sprayed with water, application quantity 500 $\mu\text{m}$ -PE/PVC	approx.	2 min
FUNCTIONAL HARDNESS	depending on kind of application at $+20^\circ\text{C}$	approx.	15 min
FINAL SETTING TIME	2,5mm adhesive in shape of a caterpillar, at $+20^\circ\text{C}$ , 50% rel. air humidity	approx.	24 h
MINIMUM TEMPERATURE FOR APPLICATION		from	$+7^\circ\text{C}$

#### WORKING INSTRUCTIONS

The surfaces of the substrates to be bonded must be dry, free from dust and grease. Remove possible parting compounds. Depending on material- and surface nature, the surfaces to be bonded are grinded or sandblasted. In addition, a priming of the surfaces with **COSMOPUR-Primer** can be recommended, if necessary.

**COSMOPUR K 1** is applied caterpillar-shaped onto one of the parts to be bonded. The adhesive hardens up with moisture, i.e. at bonding non-absorbent materials, the applied adhesive has to be sprayed with water (finely dispersed), in order to obtain a complete hardening up.

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### WORKING INSTRUCTIONS

The parts to be bonded are glued within the FILM FORMATION TIME (after dampening max. 2min.) and pressed together, if needed, until functional hardness is obtained.

**COSMOPUR K 1** swells (foams) slightly during the setting process. Freshly emerged glue can be removed with **COSMOFEN 60**, cleaner. Hardened adhesive **COSMOPUR K 1** can be grinded or sandblasted and lacquered.

- \* **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>.

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

APPLICATION QUANTITY      depending on supporting material      approx.      150-300 g/m<sup>2</sup>

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

Not hardened up **COSMOPUR K 1** is cleaned with **COSMOFEN 60**. The cleaning of hardened up **COSMOPUR K 1** is usually only mechanically possible.

### STORAGE

Store original casks tightly closed, in a dry place, at a temperature between +15°C and +25°C, without direct solar irradiation. Can be stored in unopened original casks for 12months. During the storage time, the viscosity rises.

### CASK SIZE

310ml (470g) PE-euro-cartridge, dispatch unit: 20cartridges /box  
On request, other cask sizes are available, e.g. 600ml tubular bags or drums, as well as further colours such as white or black.

### CLASSIFICATION

**COSMOPUR K 1** is **subject to classification** according to the Ordinance on Hazardous Materials (GefStoffV).

**Further information for the process 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 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.*

Replaces former issues

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