

COSMOPUR 850.75/805

2-part polyurethane adhesive

APPLICATION

COSMOPUR 850.75/805 is used as surface adhesive for the sandwich element production. - Only for professional use by instructed personnel.

COSMOPUR 850.75/805 is suitable for the bonding of different material surfaces, e.g. PVC-hard, glass-fibre reinforced plastics (GFK, grinded), aluminium, high pressure laminate (HPL), etc. onto diverse insulating materials like PUR- and PS-foams and mineral wool.

COSMOPUR 850.75/805 offers, apart from a semi-hard adhesive joint, also a high heat- and weather resistance.

COSMOPUR 850.75/805 can be over-painted, when hardened up.

COSMOPUR 850.75/805 does not contain any solvent.

TECHNICAL DATA

BASIS	2-component polyurethane reaction adhesive, solvent-free (free from easy volatile organic compounds, boiling point <+200°C)		
COLOUR	binder hardener of hardened up film		beige-white brown beige
FILM PROPERTY	of hardened up film		semi-hard
SHORE - HARDNESS	of the film, hardened up at +20°C according to DIN 53505 Shore-D	approx.	65 Shore-D
MIXING RATIO	parts by weight parts by volume	A:B A:B	=100:20 g = 4,0:1,0 ml
VISCOSITY	binder, Brookfield Sp06/50, +20°C hardener, Brookfield Sp02/50, +20°C mixture, Brookfield Sp06/50	approx. approx. approx.	6.500 mPa.s 310 mPa.s 3.000 mPa.s
DENSITY	according to EN 542 at +20°C binder hardener mixture	approx. approx. approx.	1,54 g/cm ³ 1,23 g/cm ³ 1,49 g/cm ³
POT TIME	of a 100g preparation at +20°C	approx.	75 min
FUNCTIONAL HARDNESS	e.g. sandwich bonding at +20°C	approx.	4 h
PROCESSING TIME	in the glue spreader roll at +20°C (The processing time is reduced to approx. half of the time at +30°C, and prolonged to approx. twice as much time at +10°C.)	approx.	25 min
FINAL SETTING TIME	at +20°C, 50% rel. air humidity	~75% ~90% ~100%	48 h 7 d 14 d
MINIMUM TEMPERATURE FOR APPLICATION		from	+7 °C
STRESS SHEARING STRENGTH	DIN/EN 1465 Alu/Alu(0,2mm-gap),+20°C DIN/EN 1465 Alu/Alu(0,2mm-gap),+80°C	approx. approx.	18,0 N/mm ² 5,5 N/mm ²

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The binder component has to be stirred before taking it out of the cask.

COSMOPUR 850.75 is mixed homogeneously at the stated mixing ratio with the hardener **COSMOPUR 805**. The mixed adhesive is applied uniformly with a lambskin- or glue spreader roll onto the surface layers or inner cores, which must be first dry and free from grease and dust. By pressing the surfaces in a pile at 0,015N/mm² (~1.500kp/m²), attention should be paid that no air is enclosed between the piled surfaces; if necessary, the bonding gap has to be ventilated. Maintain a uniform pressure until functional hardness has been achieved.

With **COSMOPUR 820-primer**, the adhesion on plastic- and metal surfaces can be improved. When bonding PS-hard surfaces, it is principally necessary to primer with **COSMOPUR 820**.

The pot- and hardening up times can be reduced with the **accelerator COSMOPUR 830**; then the application times also change accordingly.

COSMOPUR 850.75/805 can be dyed in the wished shade by adding **COSMOFEN colour pastes*** (white/black/blue/red/yellow).

- * **Bonding of aluminium:** only on chemically pretreated or lacquered surfaces; durable and non-aging bonding of aluminium blank cannot be achieved without the corresponding pretreatment of the surfaces to be bonded.
- * The bonding of materials with different linear expansion must be evaluated regarding their long-time performance particularly when loading in application areas with changing temperatures.
- * The adhesive changes its colour, if it is exposed to the sun (UV-radiation), but its bonding strength does not change!

The allowance of **COSMOPUR 830-accelerator** and/or **COSMOFEN colour pastes** can be effected in the binder component, together with the hardener **COSMOPUR 805**, and therefore, directly within one mixing procedure, or afterwards, in the already mixed adhesive.

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

APPLICATION QUANTITY	depending on supporting material	approx.	150-350 g/m ²
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PROCESSING TIME, POT TIME, as well as the individual PRESS TIMES, can only be exactly found out through own tests, as they are strongly affected by material, temperature, prepared quantity, application quantity, and other criteria. The user should provide adequate security additions to the given approximate values.

CLEANING

The cleaning of not hardened up **COSMOPUR 850.75/805** is made with **COSMOFEN 60**. The cleaning of glue spreader roll is made with **COSMPLAST 763**.

The cleaning of hardened up **COSMOPUR 850.75/805** is usually only mechanically possible.

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2-part polyurethane adhesive**STORAGE**

Store in tightly closed original casks, 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 approx. 12 months.

CASK SIZE**COSMOPUR 850.75-binder:**(no standard)

280kg metal drum with clamping ring and inliner,
1.400kg container.

Other cask sizes are available on request

COSMOPUR 805-Härter:

250kg metal bump-hole drum.

Accessory:

COSMOPLAST HS (liquid skin protection)

COSMOPLAST 763 (machine cleaner)

CLASSIFICATION

COSMOPUR 850.75-binder is **not subject to classification**, according to the Ordinance on Hazardous Materials (GefStoffV).

COSMOPUR 805-hardener 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 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.
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