COSMOFEN PLUS
PVC-adhesives

APPLICATION

COSMOFEN PLUS is used for the quick constructional bonding of PVC-hard parts and is only for professional use by instructed personnel:
In the window construction, for the bonding of additional profiles, such as water bars, drainage and protection stripes for roller shutters, blind components.
In the sanitary field, for the bonding of pipes, gutters, etc.
In the exhibition and label production, for the constructional bonding of PVC-hard integral foam plates.

COSMOFEN PLUS has a very good temperature stability and an exceptionally high resistance against ultraviolet radiation. The weather resistance of the adhesive COSMOFEN PLUS HV, which is necessary for the use in the window construction, has been 1988 tested and found suitable by the officially acknowledged testing laboratory for PVC – Süddeutsches Kunststoff-Zentrum in Würzburg – in accordance with the RAL-guide-line 716/1, part 1, passage 3.2.5; that means there is no yellowing of the adhesive.

TECHNICAL DATA

BASIS diffusion adhesive, vinyl chloride polymer in solvent

COLOUR of hardened up film
COSMOFEN PLUS, HV transparent-opaque
COSMOFEN PLUS weiß white

FILM PROPERTY of hardened up film hard viscous, impact resistant

VISCOSITY Cone-plate, +25°C, 30s⁻¹ approx. 3.100 mPa.s
COSMOFEN PLUS Cone-plate, +25°C, 60s⁻¹ approx. (thix.) 4.000 mPa.s
COSMOFEN PLUS HV approx. (thix.) 4.000 mPa.s
COSMOFEN PLUS weiß approx. (thix.) 4.000 mPa.s

DENSITY EN 542 at +20°C approx. 0,99 g/cm³

OPEN TIME at +20°C, 50% rel. air humidity, application quantity 150µm-glass approx. 60 sec

FUNCTIONAL HARDNESS at bonding Free of tension stripes approx. from 2 to 4 min

FINAL SETTING TIME at +20°C, 50% rel. air humidity (diffusion of solvent remainders can last up to 8 weeks) approx. 24 h (~90 %)

MINIMUM TEMPERATURE FOR APPLICATION from +5 °C

FLASH POINT -14 °C

IGNITION TEMPERATURE +212 °C
WORKING INSTRUCTIONS

The surfaces to be bonded must be clean and dry, free from dust, grease and humidity, as well as from other impurities. Therefore, clean preferably with COSMOFEN 20 or COSMOFEN 10. Not staining cleaning paper made of strong paper tissues should be used.

The viscosity of COSMOFEN PLUS-adhesives can be adjusted lower (diluted) with COSMOFEN 380.

COSMOFEN PLUS is applied directly from the tube, just onto one side of the surface to be bonded. The parts are joined within the OPEN TIME (30 to max. 60 sec) and fixed or pressed together until the functional hardness is achieved.

Load capacity of the glue joint after 16 hours, total hardening, depending on conditioning factors, up to 8 weeks.

* We recommend, in order to optimise the adhesive strength of the compound, to additionally clean the surfaces with solvent cleaners of our COSMOFEN product range, before starting to bond.

* For the bonding of very long profiles or surfaces, we recommend to use COSMOFEN 302 which has an “extended open time”.

* At bonding additional profiles (surface to be bonded: PVC-hard) onto Renolitfoil-surfaces, please take care that the additional profiles lie flat on the window profile. The application quantity of the adhesive should be dosed, so that no adhesive flows out of the adhesive joint. After this, the additional profiles should not be exposed to high temperatures or the sun (>+25°C) for 1 week. If these conditions are not respected, a blistering of the acryl layer could be the consequence!

As alternative for this application, a solvent-free system, COSMOPLAST 515, is also available.

* For the bonding of end caps made of PS, ABS, ASA or SAN with PVC-hard-profiles, we recommend to execute sufficient preliminary tests with COSMOPLAST 515.

* Not suitable for the bonding of pressure pipes.

* Diffusion adhesives can only withstand a tension <0,1mm on the adhesive gap!

* The quantity of adhesive to be applied should be chosen depending on the thickness of the material; there is a risk of a penetration of the adhesive into the material!

Please find further details in our technical information „COSMO PVC-adhesives“

APPLICATION QUANTITY

at bonding stripes:
20mm wide bonding surface approx. 8 g/per metre
40mm wide bonding surface approx. 16 g/per metre

OPEN 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, application quantity, air- and material humidity, thickness of adhesive film, pressure and other criteria. The user should provide adequate security additions to the given approximates values.
CLEANING

For the cleaning of the tools from not hardened COSMOFEN PLUS, COSMOFEN 10 is suitable.

The cleaning of COSMOFEN PLUS from metal surfaces is made by stripping the hardened up adhesive film, because there is no adhesive strength on metal.

The cleaning of COSMOFEN PLUS from PVC-hard profiles is made after the ventilation of the adhesive, with a stripping blade, and after this, if necessary, with the application of COSMOFEN 5.

STORAGE

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

Can be stored in unopened original casks for approx. 18 months.

During the storage time, the viscosity rises.

Agitate before use!

CASK SIZE

200g aluminium membrane-tube and 180g aluminium-cannula-tube;

Dispatch units: 30 tubes /box or 50 tubes /box.

Other cask sizes (tins, buckets, drums) and colours matchings available on request.

CLASSIFICATION

Information can be taken from the safety data sheet.