

KIWOPRINT® TC 2500

Screenable, solvent based pressure sensitive adhesive

KIWOPRINT TC 2500 is a high-quality pressure sensitive adhesive for the production of self-adhesive materials made of cardboard, rigid PVC, glass, metal and industrial foams as well as film made of polycarbonate, polyester, polyethylene and pre-treated polypropylene. Materials bonded with KIWOPRINT TC 2500 are very difficult to remove or even irremovable, depending on the characteristics of the substrate. Materials coated with KIWOPRINT TC 2500 can be stored for a minimum of 1 year without any decrease of adhesive strength, if covered with a suitable silicone paper and kept dry and dark at room temperature. In general, the adhesive film is sufficiently light fast. If direct influence of sunlight is to be expected, trials are absolutely essential. Bondings are resistant to water, reduced aqueous acids and alkalis as well as to many mineral oils.

APPLICATION

KIWOPRINT TC 2500 can be applied by brush, roller or screen printing. When screen printing use solvent resistant photoemulsions of the AZOCOL or KIWOCOL range and screen meshes of between 18 and 43 threads/cm. The coarser the mesh, the higher the adhesive strength. The adhesive spread is approx. 60 g/m² when printing on polyester film with a screen mesh of 36 threads/cm. Ask KIWO for advice.

For a clear recognition of the printed adhesive outline, KIWOPRINT TC 2500 can be dyed with pigments of the KIWOMIX C series. Add up to max. 5%, depending on the desired colour depth. When using critical inks, foaming or levelling disturbances can usually be eliminated by adding 1-3% of KIWOMIX ZL 1058.

The adhesive can be dried by room temperature or by tunnel dryer for industrial production. For further processing the applied adhesive must completely be dry and transparent; only then should the silicone paper be applied.

The suitability of the adhesive together with each component i.e. substrate, ink, liner, adhesion partner etc. must be tested before production parts are made. Special attention should be made for the long-term compatibility with the component materials. Also one must check the influences of the liner material and the state or nature of the substrate's structure or roughness. Silicone release agents, plasticizer migration etc. must be checked for and ruled out before one continues.

DRYING TIME

Drying time depends on the quantity of adhesive to be dried, substrate type, drying temperature and air movement. Guide values (90 µm adhesive wet film thickness):

- at 20°C approx. 20 min.
- at 70°C approx. 1 min.

Only properly dried adhesive layers give highest bond values!

TACK VALUE

Approx. 1.100 g (Polyken Tack-Tester)

PEEL STRENGTH	Approx. 25 N/inch, measured with shear tension meter BE-T-EX as per ASTM. Adhering area 2,5 x 10 cm, 90 µm adhesive wet film thickness.
HEAT RESISTANCE	Approx. +80°C (Adhering area 10 x 2,5 cm, 90 µm adhesive wet film thickness, polyester film on stainless steel, load 30 g).
REDUCER/ CLEANING	KIWOSOLV L 14

BASE	Synthesis caoutchouc
COLOUR	Yellowish, dries transparent
DENSITY	Approx. 0,90 g/cm ³
VISCOSITY	Approx. 2.000 mPas (DIN 53019, MS 33, D = 100 s ⁻¹)
SOLIDS CONTENT	Approx. 48,5%
FLASH POINT	Approx. +25°C
HEALTH HAZARDS/ ENVIRONMENTAL PROTECTION	When working with KIWOPRINT TC 2500 ensure sufficient ventilation of the working areas. Please follow further information given in the material safety data sheet.
STORAGE	9 months (at 20 - 25°C and tightly closed original container)