

KIWOPRINT® D 177

1. DESCRIPTION

Screenable, removable pressure sensitive adhesive

KIWOPRINT D 177 is a water based, acrylic pressure sensitive adhesive used to make cardboard and plastic materials removable when temporary adhesion and low peel strength are required. Point of Purchase displays, decals, and notepads are typical applications, in addition to use as an alternative to static cling vinyls. KIWOPRINT D 177 has very good ageing and light resistance. Materials coated with KIWOPRINT D 177 can be stored for a minimum of 1 year without any decrease in adhesive strength, if covered with a suitable silicon release paper and kept dry and dark at room temperature.

2. APPLICATION/ PROCESSING

METHOD

Screen printing, roller, or brush. When screen printing use a medium shore squeegee (~70 durometer / Shore A).

Ensure that all adhesive is removed from the screen during printing breaks which are longer than 10–15 minutes.

The ideal printing temperature is approx. 20°-25°C / 68-77°F.

MESH SELECTION

Range: 34 - 61 threads/cm or 85 - 156 threads/in. The adhesive strength is influenced by the screen mesh; the coarser the mesh, the higher the adhesive strength. Ask your KIWO distributor or KIWO directly for advice.

STENCIL SELECTION

Use water-resistant direct emulsions such as KIWOCOL POLY-PLUS HWR, SWR or HV.

REDUCING

KIWOPRINT D 177 can be thinned with water (max. 5%).

Test all modifications before using in production. Reducing the adhesive can negatively influence printing characteristics and peel strength.

CLEANING

Wet: water
Dry: PREGAN 1014 E

DRYING

At room temperature or using conventional tunnel dryers for industrial production. Drying time depends on the adhesive quantity, substrate type, air humidity, drying temperature and air movement.

Guide values at room temperature and 60% relative humidity:

Wet adhesive thickness	time till dry
30 µ	Approx. 5 min.
60 µ	Approx. 8 min.
90 µ	Approx. 18 min.
120 µ	Approx. 30 min.

The adhesive must be completely dry and transparent before release liner is applied or further processing undertaken.

DIE-CUTTING

Print KIWOPRINT D 177 away from the die-line. Die cutting the adhesive will cause adhesive to accumulate on the blade of the die.

NOTICE

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 paid to long term compatibility with component materials. Also one must check the influences of the line 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.

3. PROPERTIES

TACK STRENGTH Approx. 300 g.

Measured with Polyken Tack Tester. 90µ wet film thickness with hand coater onto polyester film. Notice: When screen printing, slightly lower values can be achieved due to the mesh structure of different meshes.

4. PROPERTIES

BASE: Aqueous dispersion of an acrylic polymer

COLOR: Wet: milky white
 Dry: transparent

VISCOSITY: Approx. 12,000 mPas
 (Rheomat STV, measuring system CI, 20 °C)

SOLIDS CONTENT: Approx. 54%

UV RESISTANCE: Very good

DENSITY: Approx. 1.02 g/ccm

pH VALUE: Approx. 6.5

PRECAUTIONS/ ENVIRONMENTAL IMPACT: Please follow further information on the MSDS

STORAGE: 1 year @ 20-25°C / 68-77°F in tightly closed original container.

KIWOPRINT D 177 should not come into contact with unprotected metal for a longer period.
PROTECT AGAINST FREEZING.

5. PACKAGING

5 Kg	= Approx. 1.25 Gal
30 Kg	= Approx. 7.847 gal
120 Kg	= Approx. 31.39 gal

6. ADHESION:

Adhesion can be improved by:

- A. Using parts free of mold release agents or substances such as fats, oil, wax dust impregnations, etc. (Make sure all parts that come in contact with the adhesive are dry.)
- B. Optimum application temperature : 20-60°C.or 68-140°F

- C. Preventing air bubbles and stretching the substrate during application.
- D. Flat and smooth substrate (i.e. pressure molding parts without burrs or sprue marks.)
- E. Sufficient adhesion surface area relative to total surface area.

7. Additional information

For additional product information, please visit our web site at www.kiwo.com. All products mentioned in this technical data sheet are available through KIWO Inc. and its distributor network. For further information contact your KIWO distributor or KIWO direct.

Thank you for choosing **KIWO**.