# Adhesive DV D 590

## Screen able, dispersion based, two-components flocking adhesive

ADHESIVE DV D 590 is a dispersion-based, two-components flocking adhesive, especially suitable for the flocking of glass and ceramic substrates. It shows good properties, carries an excellent dish washer fastness as well as a good resistance to household cleaners and chemicals.

## PREPARATION

**Adhesive preparation**

Prior to use, stir well.

100 parts of ADHESIVE DV D 590
4 parts of Hardener DV D 5590

Both components have to be thoroughly mixed into a homogenize mixture which than has to be left alone to ripe for 20min in a closed or at least covered container.

Dyeing: Colormatch (CM)-dyeing pigments, max. addition: 2%

Pot life: at least 12h

Attention: The end of the pot life cannot be recognized by an increase in its viscosity or by any other change in properties!

**Dilution**

Water (max 5 %)

**Cleaning**

Wet: Water
Dry: PREGAN DL

**Application method**

By the screen printing method

Fabric: 21-36 threads/cm², depending on the motif and on the flock quality. One has to use water resistant copying layers originating from the AZOCOL- or the KIWOCOL copying layer program. For this, the KIWO application technical people are glad to advise you properly.

In order to guarantee a defined adhesive coat, it is basically important to have a high and even fabrics tension (>16 N/cm²).

**Application quantity**

The thickness of the adhesive coat will be primarily determined by the selection of the screen fabrics. Generally to achieve a good flock adherence, the dried adhesive coat should be about 1/10$^{th}$ of the flock length.

**Substrate**

In order to achieve a good flock adherence the surface tension of the parts to be flocked should be bigger than 38mN/m. Further the parts to be flocked have to be dry and free from any substances which might act as separating agents such as silicone, graphite, dust, grease (finger prints), etc.

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A flame pre-treatment immediately prior to the adhesive application, generally will increase the adhesive adherence to the substrate. With cold final finished glass, a flame pre-treatment is always recommended.

**Because of the large number of different kind of glass and ceramics available on the market, respective pre-tests regarding the proposed final use are mandatory.**

**Flocking**

Flocking should be carried out immediately after the adhesive coating. The open time of the adhesive depends on different factors and usually lies between 2 to 4min approx.

**Drying**

Because of the watery base of the adhesive and in order to avoid air bubbles, the flocked part should be dried for 10-20min at 60-80° C prior to the actual curing process. The curing requires a forced oven curing for 40min approx. at 140° C.

Recommended process:
First to dry for 10-20min at 60-80° C, after which the curing takes place for 40min at 140° C.

Please note: A deviation from the recommended procedure is possible, however, respective tests and pre-trials are mandatory

## PRODUCT DATA:

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|---|---|
| **Base** | Watery acrylic polymer dispersion |
| **Color/Look** | White, drying translucent |
| **Viscosity** | 58.000mPas approx. (Brookfield RVT, 20 r.p.m., spindle 7, 20° C) |
| **Solids** | 50% approx. |
| **Density** | 1,05g/cm² approx. |
| **PH-value** | 7, 5 approx. |
| **Conductivity value** | > 200 scale parts (Mahlo Textometer) |
| **Hazard advise/ Environmental protection** | Please observe the advises given in the safety data sheet |
| **Storage** | 1 year (at 20° C to 25° C in the original packaging).<br>Beware of freezing!<br><br>ADHESIVE DV D 590 should not come in touch with un-protected metal for a longer period of time. |