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BINDER B – 0821

1. Summary:

Binder B-0821 is a water based Ink for Silk Screen Printing and through printing the relevant Ink onto olefin waterproof paper (UPO), coating paper, etc., its design/pattern changes from White Color to Transparent when wetted with water and changes back to the original White again when dried reversibly.

Therefore, through printing the relevant Ink onto the design/pattern printed by offset printing, etc., the design/pattern underneath is concealed in White in the dried condition and the design/pattern underneath appears when wetted with water to become transparent. Also, its printed film is excellent in water resistance as well as in rubbing strength.

Further, through printing the Ink compounded with the coloring agent, Neo Color (coloring pigment paste) into the relevant Binder B-0821, reversible change of Colored Opacity < -- > Colored Transparency when wetted with water can be obtained and obliterating power towards the design/pattern underneath is enhanced.

2. Nature:

Appearance: White Paste

Composition: Mixture of acrylic acid ester copolymer emulsion and white pigment, etc.

Viscosity: 30,000 ~ 40,000 cps (BH Model Viscometer at 25°C)

P.H: 9.0 ~ 9.5

Specific Gravity: 1.14 ± 0.05

Ionicity: Avion

3. Usage:

[Standard Recipe]

Binder B-0821	100	100
Neo Color	--	~1
Total	100	~101

- Regarding the adjustment of Ink's viscosity, Emacol BN (within 0.1%) should be used in the case of increasing viscosity and a small quantity of water (within 5%) should be used in the case of decreasing viscosity.

Screen Plate:

Polyester mono-filament 80 ~ 120 mesh bias should be used for a screen plate and emulsion for water-resistance or water & oil-resistance should be used as photosensitive film.

Printing Operation:

The relevant Ink has lower obliterating power compared to the usual White Ink, therefore squeegee with softer hardness should be used and the printed layer should be as thick as possible and printing should be done twice in some cases.

Cleaning of a Screen Plate:

After printing, water or soapsuds is sufficient enough for cleaning the screen plate, however, when, 'clogging' is generated on the screen plate due to printing for a long period of time or drying, etc., butyl acetate, xylol, etc. should be used to wipe off with.

Drying:

Evaporation of water content is sufficient enough and there is no need to perform any special high temperature treatment.

4. N.B.:

- (a) Adhesion strength of Binder B-0821 varies depending upon the kinds of stencils and of Ink of the design/pattern. Therefore, Pre-Testing is required without fail prior to use.
- (b) When the design/pattern is dark color, obliterating power of Binder B-0821 may be insufficient. In such case, the obliterating power for the design/pattern will be improved through compounding 1% of Neo Black MKL into Binder B-0821 to be printed so that the dried film becomes opaque gray. And, when it is wetted with water, it changes to transparent gray and the design/pattern underneath appears.

Further, if excessive amount of Neo Black MKL is compounded, the design/pattern underneath will be difficult to be seen.

- (c) Trial Binder B-0821 should be stored below 30°C (86°F) tightly sealed, avoiding freezing and direct sunlight without fail.

Shelf Life is one year when it is stored in a cool dark place below 30°C (86°F), tightly sealed.

