Technical data sheet
GRAFIC PU

APPLICATIONS

General graphic printing.

GENERAL CHARACTERISTICS

- Blue pure photopolymer emulsion very resistant to solvent
- Resistant to UV-cured, plastisol and solvent-based ink. Water resistant when post-exposed
- High solids content (40%) and medium viscosity for excellent print definition on any mesh
- Exposes 4 times faster than diazo or dual-cure emulsions
- Easy to reclaim.

DIRECTIONS FOR USE

Handle under yellow safelight or low wattage tungsten lights. Avoid exposure to daylight, quartz/halogen lamps, cool white fluorescent lamps or discharge lamps.

Sensitizing and mixing

Emulsion is pre-sensitized during production and does not require mixing.

Mesh preparation and degreasing

Degrease and abrade new mesh with Direct Prep 1(abrasive gel) in order to optimize stencil adhesion; dry and store the screen in a dust free, dry environment prior to coating.
For further applications, thoroughly degrease the mesh prior to use with Direct Prep 2 (degreaser).

Coating

Using a high-quality scoop coater or coating through, apply one or two coats to the substrate side of the screen, followed by one or two coats on the squeegee side. For a thicker stencil, apply additional coats to the squeegee side prior to drying. For a higher quality stencil with a minimal increase in stencil thickness, apply one or two additional coats to the substrate side of the screen after the initial coats have dried.

Drying and storage

Thoroughly dry the coated screen at a maximum temperature of 104°F (40°C) in a dust free, dark or yellow light area, with the substrate side facing down to optimize stencil quality. Coated screens should be stored in a dust free, dry, safelight environment.

Exposing

Ensure that all surfaces, emulsion, film and glass are free of dust to minimize pinholes.
Contact the emulsion side of the positive with the substrate side of the screen and secure in position before placing the screen in a suitable vacuum frame. Many variables, such as lamp type and age, distance from lamp to screen, mesh type and coating thickness, can affect exposure time. Perform an exposure test with one of two calculators now available (Exposure Calculator and 21 Step Sensitivity Guide) to determinate correct exposure time for a complete cure.

Developing

Wet both sides of the screen with a strong, finely divided spray of water and continue washing out until all image areas are fully open. Rinse both sides of the screen and dry thoroughly before use. A properly exposed and developed screen will not leave residues on the squeegee side.

Post exposing

Post expose with daylight or exposure UV lamp to produce a more water-resistance stencil.

Reclaiming

Remove all ink residues immediately after printing with an appropriate solvent. Remove stencil with Remove ER series and a pressure washer. For stains and ghost images, use Remove HR series followed by a pressure washer.

HEALTH AND SAFETY

Before using, refer to appropriate material safety data sheets.

PROBLEM SOLVING

Poor coating quality

- Properly clean, degrease and rinse the screen to remove all residues and traces of chemicals
- Properly and evenly tension the fabric
- Clean and ensure the scoop coater does not present any defect edge.

Poor detail or difficulty washing out image

- Ensure emulsion and coated screens are handled in safelight conditions only
- Ensure a minimum vacuum of 0.66 bar (500 mmHg or 20 in Hg) on vacuum gauge for optimum contact of the positive
- Optimize exposure time and use only high-quality film positives
- Do not store emulsion or coated screen at high temperatures.

Emulsion falls off, extreme pinholes or severe stencil breakdown during printing

- Ensure that damp screens are not being exposed
- Only expose screens with an even and consistent coating thickness
- Ensure that stencil has not been severely underexposed
- Ensure emulsion has not been stored at high temperature.

Difficulty reclaiming screens

- Non reclaimable once catalysed
- Optimize exposure time and properly rinse the squeegee side of the screen during developing to remove all residual traces, especially when using higher mesh count dyed fabric.

STORAGE

When sealed in the original container and stored at temperature between 20 and 25°C, GRAFIC PU will maintain original properties for 24 months from the date of production.

PACKAGING

Available in 1, 5 and 200 kilogram containers.
In North America, available in one, five and fifty US gallon containers.

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