

ALPHASTAR

Gelatine Indirect Photostencil Film

DESCRIPTION

The exceptionally high resolution of Alphastar makes it perfect for short run, very high quality screen printing such as ceramic decals or prototyping.

Applications

- Fine line graphics, ceramic details and stickers.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- The highest resolution gelatine indirect film for fine line and halftone printing. The deep blue colour gives good colour contrast. Capable of photographically resolving detail less than 50 microns. Suitable for use with solvent based inks.
- Mesh range 77 to 180/cm (200 to 450/inch).
- Low stencil profile and superb dot reproduction makes Alphastar ideal for short run, high quality screen printing.

WORKING INSTRUCTIONS

Exposure

Cut the stencil film to size and place in the vacuum frame with the polyester base in contact with the positive, which should be right reading emulsion side up. Ensure that the vacuum frame and positive are clean. To protect the emulsion surface, cover it with a piece of matt film or masking film, and expose to the ultra violet light source.

Hardening

Immediately after exposure, evenly immerse the photostencil film in the hardening solution for one minute. This should be at a temperature of 19 to 20 °C (66 to 70 °F) and should be ideally made from Activator Powder. Hydrogen Peroxide can also be used. Recommended concentration is 1.2% (4 volumes) and the same temperatures and time apply.



Washout

Use a fine spray of water at a temperature of 40 to 45 °C (105 to 113 °F) evenly washing the entire stencil. Continue washing for at least 60 seconds after the image area appears free of emulsion; this is especially important when producing fine details stencils. Stencils should then be chilled with cool water for 10-15 seconds. Do not chill with water below 10 °C (50 °F) as this can reduce adhesion of the stencil to the mesh.

Mesh Preparation

All new synthetic monofilament meshes should be abraded with Autoprep Gel before use. (Used meshes should be re-abraded after every 5 stencils).

All meshes should be degreased using Universal Mesh Prep immediately prior to mounting the film.

Mounting

Apply the stencil to a wet screen as this helps to prevent dust and scumming (partial blockage of the stencil open areas). Place the wet stencil on the underside of the screen, emulsion side to mesh. Blot off excess water from the base support with one or two sheets of absorbent paper (unprinted newsprint). Then position the screen on a raised pad of glass or plastic slightly smaller than the inside of the frame, ensuring that the surface is clean and free from high spots.

Between the pad and the screen, lay a sheet of newsprint in order to avoid vacuum adhesion when lifting the screen after mounting the stencil. Using a soft short nap paint roller, firmly apply at least 4 or 5 sheets of clean paper to absorb all surplus moisture. Too light a pressure with the roller will fail to achieve optimum adhesion. Adequate use of paper is necessary to remove moisture and avoid scumming in the open areas.

Drying

Dry the stencil with air directed at the inside of the screen. The fan should not be nearer than 30 to 35 cm (12 to 18 inch) in order to avoid uneven drying. A cold air fan is recommended but drying can be accelerated using warm air up to 35 °C (95 °F). Hot drying at excessive temperatures (>35 °C/95 °F) or too low a humidity will cause edge curling, brittleness and a loss of adhesion.

Blockout

Block out the open area between the stencil and the frame and after drying spot out any pinholes with Regular or Blue Filler.

Stencil Removal

Remove ink from the screen with an Autosolve screen cleaner. Then apply Autokleen Plus to both sides of the screen and leave to stand for 5 minutes. The stencil can then be removed with a strong water jet. If a stain or ghost image still remains, use a further application of Autokleen Plus.



For more information on how to use MacDermid Autotype products, go to the How to Guide section at macdermid.com/autotype.

SHELF LIFE & STORAGE

The film should be kept in the protective packaging supplied. Store in a cool place away from hot drying cupboards and radiators. Do not store in a damp place. Correct storage conditions are at a temperature of 5 to 20 °C (40 to 86 °F) and at a relative humidity of 45-60%.

Shelf life at these conditions is 24 months.

PACKAGING

Alphastar is available in roll widths of 61 cm, 104 cm and 122 cm wide (24 in, 41 in and 48 in) and in a variety of lengths. Custom cut sheets are available upon request.



SAFETY & WARNING

MacDermid Autotype recommends that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use.

Safety Data Sheets are available from MacDermid Autotype.

WASTE TREATMENT

Prior to using any recommendations or suggestions by MacDermid Autotype for waste treatment, the user is required to know the appropriate local/state/federal regulations for on-site or off-site treatment which may require permits. If there is any conflict regarding our recommendations, local/state/federal regulations take precedent.

CONTACT INFORMATION

To confirm this is the most recent issue, please contact MacDermid Autotype
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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product.
 READ IT THOROUGHLY PRIOR TO PRODUCT USE.

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