

CAPILLEX CX

Controlled Profile Solvent Resistant Capillary Film

DESCRIPTION

Capillex films are precision coated, pre-sensitised capillary photostencil films, which are adhered to the mesh with water prior to exposure.

The films are coated onto a 75 μ (3 thou) polyester base. The films have been designed for use with solvent based or UV curing inks.

Applications

Capillex CX is a green capillary photostencil film specifically formulated for fine line printing in demanding Industrial applications.

- Printed Electronics

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- Capillex CX will give a low, but controlled stencil profile over a wide mesh range from 62 to 100/cm (157 to 250 inch). The low stencil profile and optimised Rz gives superb print reproduction and minimises the thick edges normally seen when trying to achieve good print definition on coarse to medium mesh counts, especially when using high build inks.
- Capillex CX will give a thin, flat, but tough stencil on all coarse to medium mesh counts. It is this thin, flat stencil that minimises the ink build at the track edges to produce a cleaner more reliable print that can not only save ink but also reduce wastage.
- Capillex CX is perfect for demanding industrial applications such as conductive or resistive ink printing and other critical deposit applications. Unlike conventional capillary films, Capillex CX will consistently give the same low, but controlled, stencil profile over a wide mesh range.
- Capillex CX can be used with conventional UV and solvent based inks. Very low stencil profile, typically 3 to 4 μ .
- Optimised stencil surface – low Rz.
- Excellent mounting characteristics.
- Wide exposure latitude.
- Easy washout.
- High resolution.



- Excellent print quality.
- Very durable.

WORKING INSTRUCTIONS

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.

Adhering to the Mesh

For large or small screens: -

For best results use the Caplicator film applicator. Cut the film to size and place the film on a dry, flat surface. Using the Autotype Anti-Static Duster, remove dust from the polyester as the film is rolled, emulsion side out, leaving approximately 2 cm (¾ inch) unrolled. Place the film inside the Caplicator. Spray the mesh with water and wipe excess water from the perimeter of the frame to avoid rivulets after adhering the film.

Contact the rolled film leading edge onto the top of the wet vertical screen and unroll the film down the screen, thus adhering it to the mesh. Remove excess moisture from the inside of the screen with a lightweight, window cleaner type squeegee. Wipe excess water from the perimeter of the frame with absorbent cloth then proceed to drying.

For small screens only:-

Place the film emulsion side up onto a raised pad and lay the dry degreased screen on top. Using a hand spray water bottle, spray water onto the mesh until the film is completely wet. Then squeegee off excess water from the inside of the screen. Wipe water from the perimeter of the frame then proceed to drying.

For more information on how to apply Capillex film, go to the How to Guide section at macdermid.com/Autotype.

Drying the Screen

The screen can be dried with cold or warm air, maximum 30 °C (86 °F). Thorough drying is essential for optimum results. When the support has been peeled off continue drying for a few minutes to ensure the film is completely dry.

Storage of Screens

After applying the Capillex film to the screen and drying, the screens can be kept in the dark for up to a week before exposure, provided that ambient temperature and humidity



conditions are maintained. If storage of screens is anticipated, it is recommended that the backing sheet is not removed until the screen is about to be exposed.

Exposure

Correct exposure is essential for optimum stencil performance. Underexposure will give a weak stencil and reduce resistance.

Remove dust from the surface of the stencil and tape positive in position. Place entire screen in a suitable vacuum frame and expose. We recommend use of the Autotype Exposure Calculator for test exposures to ascertain correct timing.

Washout & Drying

Wash out the screen from both sides with a strong spray of water. Continue the washout until all parts of the image appear clean and sharp. Blot off surplus moisture and dry at a maximum temperature of 30 °C (86 °F).

Spot out pinholes and block out the area between the edge of the stencil and the frame with Regular, Thick or Blue Filler when using solvent based or UV curing inks.

Stencil Removal

Remove ink from the screen with an Autosolve screen cleaner. Then apply Autostrip 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 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 18 months.

PACKAGING

Capillex 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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