

## Technical Data Sheet

### STA-SHARP® S3S

#### NEW-FORMULATION SOLVENT-ADHERED KNIFECUT STENCIL FILM

##### INSTRUCTIONS

##### **FABRIC PREPARATION**

Please note: screen fabric must be properly and uniformly tensioned; otherwise the adhesion of re-formulated Sta-Sharp S3S will be jeopardized. Used or surface-treated fabric need only be degreased using **Magic Mesh Prep**, **Screen Degreaser Liquid No. 3**, or dilute **Screen Degreaser Concentrate No. 33**. (Roughening is required for new fabric that is not surface treated. Roughening increases the surface area of the fabric for a better mechanical bond of the stencil. Abrading and degreasing can be combined in one step with **Ulanogel 23** brushed vigorously on both sides of the fabric for several minutes on each side.) Rinse the screen fabric thoroughly until there are no bubbles on the surface of the mesh. Dry the mesh completely before applying the film.

##### **CUTTING**

Cut film on a flat, hard surface under good lighting conditions. Protect the emulsion surface against perspiration with a piece of plastic. Use a sharp blade held perpendicularly to the film. For peeling, use a dull blade, a pair of tweezers, or adhesive tape. Cut completely through the emulsion but not into the support; otherwise, "burnt" edges may occur. Overcuts close during adhering.

##### **PREPARATIONS FOR ADHERING**

Wipe the surface of the stencil clean using dry, lint-free material before adhering. Place a firm, flat buildup board (about two inches smaller than the inside dimensions of the frame) on the work surface. Under high humidity conditions, place a sheet of newsprint on the board to prevent the smooth polyester backing sheet from sticking to the buildup board. Place the cut and peeled stencil, emulsion side up, on top of the sheet of newsprint on the buildup board. Place the dry, degreased screen over the stencil. Warped screen frames prevent perfect mesh-emulsion contact, so that adhesion will be poor. (If there is no choice but to use a slightly warped frame, put weights on the corners of the frame.) Have ready two clean, absorbent rags and **Sta-Sharp 4143 Adhering Liquid** adhering liquid.

##### **ADHERING STA-SHARP S3S**

Fold the two clean rags into a pads. Wet one with **Sta-Sharp 4143 Adhering Liquid** adhering liquid. In a smooth, continuous motion, slowly wet the squeegee side of the mesh, gently pushing the adhering liquid into it. As the film wets, its green color darkens. Follow the wet pad immediately with the dry pad, working in tandem. Lighter-color spots indicate poor wetting and poor adhesion. Blot small, un-adhered details lightly with the adherent-saturated rag. For larger, un-adhered areas, move the rag with light pressure from open mesh areas toward the stencil edges to help keep stencil edges well defined. If possible, set up a fan to blow cold air over the work surface to speed the drying time.

##### **DRYING THE STENCIL AND PEELING OFF THE PLASTIC BACKING SHEET**

Dry the stencil under a fan from the squeegee side. **WAIT FOR 20 MINUTES OR MORE FOR THE ADHERING LIQUID TO EVAPORATE.** The higher the ambient humidity, the longer the drying time will be. When the film is completely dry, the polyester backing sheet can be peeled with little resistance; if it cannot, dry the film longer.

##### **INK REMOVAL**

Remove aqueous inks with water. Remove solvent inks with the washup solvent or solvent blend recommended by the ink manufacturer. Degrease with **Screen Degreaser Liquid No. 3** to remove ink and solvent residues that might impair the action of the stencil remover.

##### **STENCIL REMOVAL**

To remove the stencil, wet the printing (film) side of the mesh with **Sta-Sharp 4143 Adhering Liquid**. Place the film side of the frame down, over several sheets of newspaper. Saturate the inside of the screen with **Sta-Sharp 4143 Adhering Liquid**. After a few minutes, lift the screen and pull away the first sheet of newspaper. Most of the dissolved film will adhere to it. Change the bottom sheet of newspaper several times. Wash the inside of the screen with clean rags and additional **Sta-Sharp Adhering Liquid**. If the film has stained the fabric, apply **Walk Away Haze Remover** to both sides of the screen fabric, then let it dry—if possible, overnight. Rinse the screen gently to avoid splash-backs, then increase the water pressure until the mesh is open.

116dm