

## Coating Guide

# ProChem® HD-RED

**Photopolymer Emulsion** 

Note: SS - Squeegee Side / PS - Print Side

HD-Red	Mesh	Total thickness				EOM/SS
PROCESS/ FABRIC	Mesh thickness		4 SS + scrape PS + 8 SS	4 SS+ scrape PS + 12 SS	4 SS+ scrape PS + 16 SS	Thickness increase per coating stroke on the squeegee side
Polyester 81-100 (32-100 metric.)	145 µm	230 µm	315 μm	395 μm	480 μm	21 μm/coat SS
Polyester 107-80 (42-80 metric.)	115 µm	185 μm	260 μm	330 µm	405 μm	18 μm/coat SS
Polyester 140-70 (55-70 metric.)	104 µm	145 µm	190 µm	235 μm	280 μm	11 μm/coat SS
Polyester 195-48 (77-48 metric.)	73 µm	120 µm	170 µm	220 μm	265 μm	12 μm/coat SS





Slowly coat 4 times on the inside (that is the squeegee side), filling the mesh with emulsion. Then, in order to avoid air bubbles on the stencil, scrape the excess emulsion from the print side with another coater. This collected excess emulsion should be kept for subsequent use. After that, without drying, coat 6 to 18 times on the squeegee side, forcing the emulsion to the outside, creating thus a thick layer.

In order to obtain a more uniform emulsion layer, reverse the coating direction every 4 passes.

The more coats on the squeegee side, the thicker the emulsion layer on the print side. For the same coating process, the final thickness depends on the type of mesh.

#### Drying

Dry the emulsion completely with the print side down. Never dry, leaving the screen upside down because gravity would force the emulsion to the squeegee side, reducing the external thickness and impairing the stencil flatness.

The thicker the emulsion layer, the longer will be the drying time. For very thick layers it is suggested to leave the screen to dry overnight at ambient temperature (75°F/22°C) in a dark and dry area. Care should be taken to avoid accidental exposure to light.

To evaluate if the emulsion has dried completely, a surface humidity meter can be used. Otherwise the transparency of the emulsion layer should be observed: If the stencil looks milky the emulsion is not dry enough.

If the drying air is too hot, it may cause the formation of a hard surface layer which may difficult the drying of the inside layers. It can also create a non uniform layer with bubbles and influences the fabric stability.

To Order Call (800)753-5095

#### Chemical Consultants, Inc.

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#### **Applications**

Pre-sensitized Photopolymer emulsion for Textile and Ceramic applications.

#### Physical Properties

- Red Colored, also available in clear
- Extreme High Viscosity = 50,000 cps
- **\*\*** Ideal for High Density Printing
- M Outstanding resolution and edge definition
- **Short exposure time**
- Extremely Durable for long print runs
- Wirtually pinhole and fish-eye free
- Excellent chemical resistance
- # High solids content = 52% solids

#### Handling

Handle under yellow safelight conditions.

#### Sensitizing

HD-RED is a one part emulsion that does not require a diazo to be added. Use straight from container.

### Mesh Preparation

It is important to have a clean dry screen before you apply the emulsion. To achieve this use a good degreaser available from CCI.