



Mesh Adhesives and Edge Protection Lacquer

SERIFIX/2-EXTRA – SCREENFIX – PROTOCOLAC

Serifix/2-Extra:

is a catalysed mesh mounting adhesive which provides a strong, permanent bond. Suitable for wood, steel, aluminium or painted frames and nylon, polyester and stainless steel fabrics.

- Extremely easy to use.
- Good pot life and a fast cut-out time.
- When cured, it is resistant to most solvents generally used in screen printing.

Screenfix:

is a catalysed mesh mounting adhesive with similar performance characteristics to Serifix/2-Extra, but with the additional benefit of improved resistance to a wide range of solvents.

- Extremely easy and economical to use.
- Good pot-life and fast cut-out time.
- When cured, it is fully resistant to all solvents generally used in screen printing.

Uvifix:

is an advanced, UV curing one-pack mesh mounting adhesive. It produces a strong, durable bond between all mesh types and combines ease and speed of processing with improved user safety.

- Ultra-fast cure.
- Immediate cut-out post cure.
- Minimal odour.
- Fully resistant to all solvents generally used in screen printing.

Protolac:

is a two-pack product which provides a permanent protective seal at the junction of the frame and the screen fabric, as well as over the mesh mounting adhesive. It will act as a permanent mask around the printing area and as a reinforcing lacquer over most photostencil emulsions around, but not within, the printing area of the stencil. It can also be used to protect unpainted steel frames from corrosion.

- Easily brushed lacquer.
- Compatible with Serifix 2-Extra and Screenfix (uses same catalyst).

Pre-treatment of Frames

New wooden frames do not normally require any special pre-treatment provided they are clean and dry. Steel and aluminium frames should be roughened with an abrasive and thoroughly degreased with Acetone or MEK (Methyl Ethyl Ketone). It is strongly advised that all aluminium frames should be primed with the adhesive to be used and cured prior to mounting the mesh. All traces of rust, oxidation, grease and other impurities must be removed. Painted metal frames should be degreased and it is advisable to establish that the painted surface is compatible with the adhesive. Serifix/2-Extra, Screenfix and Uvifix may be applied directly over a previous layer of any of these adhesives, provided they are thoroughly keyed, flat and even. **Residues of other adhesives should be removed as these could adversely affect adhesion.**

Instructions for Use -

Serifix/2-Extra/Screenfix

Thoroughly shake the base and catalyst before every use to ensure contents are fully dispersed - then mix ideally by weight:

Serifix/2-Extra:

1 part Serifix/Protolac Catalyst to 10 parts Serifix Base

Screenfix:

1 part Serifix/Protolac Catalyst to 5 parts Screenfix Base

Sericol Measuring Cups are disposable paper cups with a capacity of 250 ml and are ideal for mixing a convenient quantity for most applications. Measure the required quantity of base into the cup and add the appropriate amount of hardener with a 5 ml measuring spoon. The product has sufficient tolerance to slight variations, e.g. half a 5 ml spoonful instead of 2 ml exactly, but excessive or lack of catalyst can lead to poor solvent resistance. Do not mix more adhesive than is likely to be used within the 30 minute pot life.

The components should be mixed thoroughly in a clean container. This is most important as an uneven mixture or the presence of other substances, including traces of water, will adversely affect the performance of the adhesive.

Container lids should always be replaced in order to prevent reaction with atmospheric humidity.

The base will thicken on exposure to extreme cold, below 0°C, but will return to normal consistency when brought back to room temperature, 20°C. This process can be hastened by placing the container in warm water for a period of 15 minutes. In such cases it should be thoroughly shaken before it is dispensed from its original container.

It is recommended that gloves are worn when handling all mesh adhesives as they may cause rashes or similar disorders if allowed to come into continuous contact with skin. It is also recommended that they are used in a well ventilated area.

Using a stiff, short haired brush, apply Serifix/2-Extra or Screenfix through the stretched fabric onto the frame. Ensure good contact between fabric and frame, and especially with fine mesh ensure that the adhesive has been worked thoroughly through the mesh onto the frame surface. Allow to dry for a minimum of 20 minutes before cutting away from the stretcher. In cold and damp conditions and when stretching stainless steel, coarse and high tension mesh, extra time should be allowed.

Screens can be degreased and stencils applied approximately 2 hours after application of the adhesive, but should be left to cure overnight before being exposed to strong solvents or high temperatures. Brushes used with Serifix/2-Extra or Screenfix should be cleaned immediately after use by wiping off excess adhesive with a rag or absorbent paper and submersing in Rigid Thinner (ZV541). Prior to further use the Rigid Thinner should also be wiped off.

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Instructions for Use - Uvifix

Uvifix should be applied in subdued or yellow light conditions. To give a uniform coating, a brush with short bristles or a card should be used to apply Uvifix through the stretched fabric on to the frame. Ensure good contact between fabric and frame, and that the adhesive has been worked thoroughly through the mesh onto the frame surface. Care should be taken to ensure no surplus Uvifix runs down the frame sides as it may not cure (i.e. dry) thoroughly on exposure.

Exposure

The length of exposure time depends on the light source, its distance from the frame and the thickness of the adhesive coating. A photopolymer lamp with an emission peak of 365nm gives the shortest cure times. Diazo lamps require slightly longer exposure. As a guide, the following can be used as a basis for initial cure tests.

Frame Type	5000W UV Lamp (photopolymer) at 60cm
Aluminium/Painted metal	2.5 minutes
Plywood	3 minutes
Cedar	4 minutes

The above exposure times are based on a 120 thread per cm white synthetic mesh. Longer exposure will be required if dyed mesh is used (+25%) or stainless steel mesh (+50%).

Screens can be cut out, degreased and stencils applied, immediately after curing, but should be left 1 hour before being exposed to strong solvents.

Instructions for Use - Protolac

Shake both containers, then thoroughly mix the two components in a clean dry container as follows:

2 parts Protolac Base to 1 part Serifix/Protolac Catalyst by weight.

The screw caps of both lacquer and hardener should always be replaced after use to prevent reaction with atmospheric humidity. Do not mix more than 1 day's requirement.

Protolac base will thicken on exposure to extreme cold, below 0°C but will return to normal consistency at room temperature (20°C).

Application

The adhesive on newly covered screens should be left to cure for at least 2 hours or preferably overnight, prior to over lacquering with Protolac when edge sealing.

When used as a permanent mask around the image area, the use of a Sericol Coating Trough is recommended to ensure a smooth, even coating.

Brushes should be cleaned, immediately after use, in ZV541 Rigid Thinner.

Brushes in continuous use may be left immersed in Rigid Thinner after first removing excess lacquer.

Drying and Curing

The time taken for Protolac to become touch dry and fully cured will depend upon how much is applied and on the temperature.

The following guide is a basis for initial tests:

Temperature	Touch Dry	Fully Cured
20°C	1 hour	Overnight
40°C	45 minutes	4 hours

Standard Packing

Serifix/2-Extra Screen Mounting Adhesive:

SFE06 Standard Pack comprising 1 ltr Base and 0.12 ltr Catalyst
SFL93 Base Only - 5 ltr and 1 ltr containers
SFE05 Serifix/Protolac Catalyst - 1 ltr and 0.12 ltr containers

Note: Catalyst for 5 ltr quantities of Base is sold as a separate unit.

Screenfix Screen Mounting Adhesive:

KWR29 Red: Base only - 5 ltr and 1 ltr containers.
KWR30 Green: Base only - 5 ltr containers.
SFE05 Serifix/Protolac catalyst - 1 ltr and 0.12 ltr containers.
KWT31 Screenfix Thinner - 1 ltr containers

Uvifix Ultra-violet Curing Screen Mounting Adhesive:

VFE51 1 ltr containers

Protolac Edge Protection Lacquer:

PDW75 Blue Lacquer 1 ltr container
SFE05 Serifix/Protolac Catalyst 1 ltr & 0.12 ltr containers

Storage

Containers should be tightly closed immediately after use. Keep away from heat sources, out of direct sunlight and away from organic peroxides.

For maximum shelf-life, Uvifix should be stored at temperatures below 10°C. At these temperatures Uvifix has a shelf-life of approximately 6 months.

Uvifix is outside the Petroleum (Inflammable Liquids) Order 1971 and the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972.

Safety and Handling

Serifix/2-Extra and Screenfix Screen Mounting Adhesives, Uvifix Ultra-violet Curing Screen Mounting Adhesive and Protolac Edge Protection Lacquer :

- Are formulated to be free from any (toxic) carcinogenic, mutagenic or reprotoxic chemicals.
- Should be stored away from heat.

Serifix/Protolac Catalyst:

- **Contains isocyanate and should not be used by persons suffering from bronchitis or asthmatic symptoms.**

Comprehensive information on the safety and handling of these products is given in the appropriate Sericol Safety Data Sheets, available upon request.

Environmental Data

Serifix/2-Extra and Screenfix Screen Mounting Adhesive, Uvifix Ultra-violet Curing Screen Mounting Adhesive, and Protolac Edge Protection Lacquer:

- Do not contain ozone depleting chemicals as described in the Montreal Convention
- Are formulated free from aromatic hydrocarbons which are known to have an adverse effect on the environment

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Problems and Solutions

Faults

Probable Cause and Remedies

1. Mesh delaminates from new wooden frames.

- a. Check frame is dry.
- b. Resin exuding from timber - Apply and cure one coat of adhesive onto frame as a sealer before covering.

2. Mesh delaminates from mild steel or aluminium frames.

- a. Surface insufficiently prepared to enable adhesive to key - Prepare again and degrease with either Acetone or MEK (Methyl Ethyl Ketone) also prime frame surface with one cured coat of adhesive before covering.

3. Lack of adhesion in general to all types of frame.

- a. Insufficient adhesive worked through the mesh onto frame surface - Take extra care, especially with fine meshes. In cold and damp conditions and when stretching stainless steel and coarse meshes, extra curing may be required before cutting away from stretching equipment.
 - b. Insufficient or uneven contact between mesh and frame during curing of the adhesive - Remove old adhesive/ink residues and keep frame and mesh in close contact; check frame is not warped.
 - c. Reaction to previously used adhesive - Remove old adhesive.
- Additionally (Serifix and Screenfix)
- d. Adhesive mixed to incorrect ratio - Check component proportions.
 - e. Adhesive base and hardener not fully mixed - Always shake base and catalyst thoroughly before every use.
 - f. Catalysed adhesive has over reacted - Do not exceed recommended pot-life.
 - g. Adhesive has been exposed to excessive heat before being fully cured.

4. Embrittlement of dried coating

Adhesive layer too thick or uneven, use a card to apply a thinner layer.

The information and recommendations contained in this Product Information sheet, as well as technical advice otherwise given by representatives of our Company, whether verbally or in writing, are based on our present knowledge and believed to be accurate. However, no guarantee regarding their accuracy is given as we cannot cover or anticipate every possible application of our products and because manufacturing methods, printing stocks and other materials vary. For the same reason our products are sold without warranty and on condition that users shall make their own tests to satisfy themselves that they will meet fully their particular requirements. Our policy of continuous product improvement might make some of the information contained in this Product Information sheet out of date and users are requested to ensure that they follow current recommendations.

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More than ink...Solutions.



Sericol Limited Pysons Road Broadstairs Kent CT10 2LE England
Telephone: (01843) 866668 Fax: (01843) 872074

UK Sales - Tel: (020) 8391 8010 Fax: (020) 8391 8008
Email: UKsales@Sericol.com

Customer Service Centres - Tel: 0845 084 89 89
*Birmingham, Bristol, Broadstairs, Gateshead, Glasgow,
Leeds, London-North, London-South, Warrington.*

Technical Helpline - Tel: 0845 770 80 70

Export Sales

Pysons Road Broadstairs Kent CT10 2LE England
Tel: +44 (0)1843 866668 Fax: +44 (0)1843 872122
Email: Exportsales@Sericol.com

www.sericol.com