

*Introducing another unique new product for silk painters and dyers.*

## **PROCOLOUR SELFFIX DYES**

**Selffix dyes fix by themselves at room temperature producing brighter colours than the French steamfix dyes do. No time consuming fixation hassles. Simple to apply - use the liquid dyes pure, intermixed, or diluted with water. They're true dyes not paints so they leave the fabric soft, lustrous and unimpaired.**

### **SELFFIX DYES CAN BE USED FOR ( in performance-based order of usefulness ) :**

**SHIBORI AND TIE DYEING** The sharpness of veiny detail captured by the 'rapid striking' nature of the Selffix dyes make them ideal for shibori work on silk. A few of the exciting new shibori techniques made possible by the Selffix dyes are described in detail on page 2.

**LIQUID DYE PAINTING** especially on silk.

**GUTTA RESIST TECHNIQUES** compatible with RESISTAD.

**THE IMMERSION DYEING** of the following fibres in a hot or cold bath: silk, flax, dry flowers, leaves, wood, paper, acrylic and some polyesters. Cotton and cellulose fibres are also stained if they're unbleached and the tannin still remains.

**DYE CRAYON DRAWING** (see Tech. Info. Sh.12).

**ANTIFUSANT TECHNIQUES** (see Tech. Info. Sh.7). .

**PRINTING**

**BATIK**

**NOT SUITABLE FOR SALT, UREA, WATERMARK AND RUN TECHNIQUES** The Selffix dyes have such strong affinities for the silk that they 'strike'(fix) too quickly to be suitable for these techniques (as described in Tech. Info. Sh.8 & 9).

**Selffix dyes should not be mixed with Steamfix or Heatfix dyes. Also, they cannot be mixed with heatset fabric paints.**

### **SELFFIX DYES ARE SUPPLIED IN TWO FORMS: (Prices in NZ\$)**

**1. LIQUID** – Ready to paint . They have a lifespan of at least one year. Prices are the same as the Procolour Steamfix and Heatfix liquid dyes ie:

**250ml \$12.00, 500ml \$20.00, 1 litre \$35.00 NB. 1ml of liquid dye = 1g**

**2. POWDER** – The simple recipe for making liquid Selffix dyes from powder is given below. Because liquid dyes are predominately water, big freight savings can be made by making the liquid dyes yourself at the place of usage, especially if you live far away from Procolour. Each powder colour is the same price:

**30 - 50g\* \$18.00, 100g \$30.00, 250g \$65.00, 500g \$120.00**

**\*The smallest powder dye packs supplied are exactly the correct amount for making 1 litre of liquid dye for each and every colour in the range. This is helpful for those without scales.**

### **MAKING THE SELFFIX POWDER DYES INTO LIQUID FORM**

Using the smallest powder pack that contains exactly the right amount of powder to make 1 litre of liquid dye.

Put this powder into a 1 litre measuring jug which is able to withstand boiling water.

Add 150g of UREA to the jug. (150g =  $\frac{3}{4}$  cup)

Add 30ml of DYESOLVE and mix these ingredients into a uniform paste. (30ml = 2TBSP)  
Add boiling water up to the 1 litre mark on the jug. Stir until all the paste is dissolved. Use soft water and if this is not available from your tap then collect and use rain water.  
Put the dye into labelled and dated bottles ready for use.

## **SHIBORI TECHNIQUES WITH LIQUID SELFFIX DYES**

All the shibori work outlined below involves fabric which has been presoaked prior to any dye application. The presoak solution is made as follows: Dissolve 1 TBSP of baking soda or 1 TSP of soda ash per litre of warm water. If you wish to limit the time that the silk is presoaked to less than a minute then, the presoak must be done in warm, not cold, presoak solution.

**The first technique** involves crumpling the wet presoaked fabric on a flat work surface covered with plastic sheeting.

The fabric can be tightly or loosely crumpled. It can be methodically folded in parallel pleats, screwed in spirals, or just randomly scrunched, according to your creative whim. Now simply apply Selffix dye of various pleasing colours and strengths to the wet crumpled fabric. I prefer to push the dye into the fabric with a stiff bristled brush well loaded with dye, but you could drizzle the dye onto the fabric with a squeeze bottle, etc. (For all shibori techniques, when you wish to make pastel colours, simply dilute the Selffix dyes with water only.)

You'll notice how the dye travels in spidery lines along the fold valleys in the crumpled fabric. This spidery detail will be retained because the dyes strike and fix pretty well immediately!

After dye application the wet painting can be immediately thrown in a rinse bath containing plenty of cold water plus a squirt of **STAINGUARD**. Condition with fabric softener and iron dry.

This shibori technique is open to variation and development. It's quick and therefore commercially much more viable than traditional shibori involving tying and immersion dyeing. Also it produces an extremely sophisticated result mostly dependent on the charm of the colour scheme.

**The second shibori technique** gives a pattern which looks like a tiger's skin. It is best done on a long scarf.

Pin one end of the presoaked wet scarf to any wooden fixture with a drawing pin. Twist the other end of the scarf until the entire length looks like a straight length of twisted cord. Keeping the twisted length taught, straight and horizontal, use another drawing pin at the opposite end so the twists can not unravel.

Paint rings of Black Selffix dye around the cord at either end and then at handspan spaces along the entire cord length. Fill in between the black rings with rings of different browns and golds.

When the painting is complete unpin the scarf and throw it into a rinse bath containing plenty of clean cold water plus a squirt of **STAINGUARD**. Then finish as described in the first shibori technique above

## **IMMERSION DYEING FLAX, DRY FLOWERS, LEAVES AND WOOD**

Add liquid Selffix dye to hot water in a stainless steel or enamelled iron pot. Heat and add the above dry goods for dyeing. Add 1TBSP of salt per litre of hot water in the bath. Dye uptake can be accelerated by adding 1 TSP of **SODA ASH** per 5 litres of bath liquor. Simmer and stir until the desired colour is reached. Rinse and dry

## **IMMERSION DYEING SILK WITH LIQUID SELFFIX DYES**

Add liquid Selffix dye to cold water in a stainless steel or enamelled iron pot. About 50ml of liquid dye (made with the above recipe) will dye 100g of protein fibre to a full dark shade at room temperature in half an hour. For a 100g of fibre you'll need at least 3 litres of cold water to ensure that the fibre is uncongested and therefore dyes evenly. Put the fibre in the dye bath and stir until

the desired colour is reached. The dye uptake can be speeded up by heating the bath and/or raising the pH by adding approx. ½ TBSP of baking soda per litre of bath liquor. For pastel shades the dye uptake can be retarded by adding DIFFUSANT and/or lowering the pH by adding approx. 1 TBSP of white vinegar per litre of bath liquor. For tightly woven fabrics dye penetration can be enhanced by adding DYESOLVE. After dyeing rinse in cold water plus a squirt of STAINGUARD. Condition with fabric softener, spin, and then iron the damp fabric dry.

### **MAKING GUTTAS WITH LIQUID SELFFIX DYE PLUS RESISTAD**

Guttas are made in exactly the same way as they are with Steamfix and Heatfix dyes:

**To make medium viscosity gutta** suitable for hand pipette, brush application, or block printing, thoroughly mix **1 part MEDIUM RESISTAD concentrate with 1 part liquid Selffix dye** which can be pure, or a mixture of colours, or a pastel colour which has been diluted with water only.

Though the gutta can be used immediately it is best to leave it for 6 hours before use. Improved performance from such a delay is normal for most print pastes.

**To make thick viscosity gutta** suitable for screen printing, thoroughly mix **1 part THICK RESISTAD concentrate with 1 part liquid Selffix dye** (pure, intermixed, or water diluted).

**All other Procolour guttas can be used as usual with Selffix dyes.**

For multi-coloured gutta effects see Tech. Info. Sh. 6 'Polychromatic gutta techniques'.

### **PAINTING WITH LIQUID SELFFIX DYES AND COLOURING IN GUTTA DESIGNS**

1. Use the dyes pure, intermix the colours, or dilute them with soft water. If the liquid dyes are not freshly made, shake them well before using them.

2. Getting dilute pastel colours to spread without becoming uneven due to premature dye strike, is perhaps the main difficulty encountered when using the Selffix dyes for painting. This aggressive **grabby strike found especially with pastel shades can be retarded with DIFFUSANT or dishwashing detergent ('Sunlight or 'Palmolive') plus lowering the pH with ACETIC ACID 50% or white vinegar.** This is done by making a dye diluent mixture as follows:

2ml or ½ TSP of DIFFUSANT or detergent + 3 drops of ACETIC ACID 50% or ½ TSP of white vinegar +100ml of water.

Add any desired amount of the above diluent mixture to the Selffix liquid dye whenever pastels colours are required. **But don't add pure undilute DIFFUSANT or detergent directly into undiluted Selffix dye, because they will spoil the dye.**

A methodical brushing technique can also improve the evenness of pastel colour coats. Basically the trick is to keep the wet dye periphery expanding as rapidly as possible by always depositing the brush loads of dye just behind the spreading dye front. It is also important to use brushes large enough to deliver a continuous flow of dye and thus maximize application speed. I find the large size Chinese pointed water colour brushes best for this job.

Methodical coverage of painting areas is also important to ensure that the expanding dye front is not so large and multi-directional that it is difficult to maintain a steady speed of dye spreading.

3. After completing the painting it is best left overnight to maximize dye fixation and therefore colour yields. If you wish to shorten this curing period then the painting must be steam ironed before proceeding with steps 4.and 5.

4. Rinse the painting in plenty of cold water plus a squirt of dishwashing detergent ( detergent reduces backstaining by any dye colour in the rinse water) either 'Sunlight' or 'Palmolive' are good. Better still, to retain maximum colour and permanently improve the washfastness, make the first rinse bath as follows:

Approx. 1 TSP of **SODA ASH** + approx. 1 TBSP of **STAINGUARD** + 5 litres of cold water.

The soda ash increases alkalinity which improves fixation

The stainguard reduces backstaining and permanently improves washfastness

After using the above rinse the alkalinity must be returned to slightly acid by adding a little Acetic acid or vinegar to the next rinse bath containing fabric softener.

5. Condition with fabric softener, spin, and then iron the damp printing dry. To avoid back staining minimize the time that damp fabric is left in contact with itself in a heap.

## **PRINTING WITH LIQUID SELFFIX DYES**

GUAR is the recommended thickener for making liquid Selffix dyes into print pastes. **For brush painting and block printing 3g of GUAR should be in 100g of Selffix print paste. For screen printing 5g of GUAR is needed per 100g of paste.**

In practice it's easier to make up a clear thickener concentrate of **10g of GUAR plus 90g of water. This is called a 10% thickener stock.** To get such a concentrate lump free, you'll need to put the water in an electric mixer and slowly pour the GUAR down the water vortex created when the mixer is turned on. This stock thickener keeps well in the fridge and can be used whenever required to thicken (pure, intermixed, or pastel) liquid Selffix dye.

(Don't add DIFFUSANT to pastel dyes if they're going to be used for print pastes.)

**To make screen printing paste from liquid dye, thoroughly mix 1 part of stock thickener with 1 part of liquid Selffix dye (pure, intermixed, or pastel)**

Although this recipe halves the dye concentration present in the print paste as compared with that present in liquid dyes, you'll find the colour intensity of prints, made with this paste, similar to paintings done with liquid dye of double the strength. This is because print paste does not spread like liquid dye does when it's applied to fabric.

## **ADDITIONAL SELFFIX DYE NOTES**

The active lifespan of liquid Selffix dye is at least one year.

After lengthy storage, if liquid dyes precipitate to form a sediment on the bottom of the container, reheat them and add a little more water, DYESOLVE and UREA. They should again hold in solution.

Because Selffix dyes are very keen to fix on protein fibres, they are also very quick to fix on your hands, so you'll need to work in rubber gloves. In this respect these dyes are much more aggressive than the Steamfix or Heatfix dyes are! If the skin becomes coloured, remove the stain by rubbing it with undilute household scourer, eg. Jiff.

Because brushes are usually made of protein animal hair, so the Selffix dyes are very keen to fix to them too. Build-ups of dark coloured dye can contaminate brushes for future use with paler dye shades. So to avoid this, label and dedicate brushes to one colour only. Brushes can be cleaned to some extent by soaking in DYESOLVE plus boiling water. More radically brushes can be dangled so that only their hair is immersed in a hot bath containing discharge bleach.

Because raising the pH increases fixation for Selffix dyes therefore, adding baking soda to the rinse water may help if dye bleeding is a problem.

These dyes are non toxic and do not contain any known carcinogens. However, they are industrial strength substances and therefore should be stored securely away from children and pets. Direct contact with the skin should be avoided. Don't handle powder dyes in draughty conditions to avoid airborne contamination. Static electricity in clothing can cause any type of powder dye to jump a hand span through the air onto charged clothing so beware of this contamination scenario.

Avoid breathing dye powder dust and vapors from hot concentrated dye solutions.

It is best to wear a mask when making liquid dyes from powders.

**THOUGH THIS DYE TYPE IS AMONG THE MOST VIBRANT KNOWN TO MAN, IT'S DOWNSIDE IS IT'S MARGINAL WASHFASTNESS ON SILK.** So it is advisable to test the applicability on a small scale before larger silk projects are undertaken. To date, the best method of permanently improving the washfastness of a Selffix dye painting is to rinse in **STAINGUARD** solution as described in 4. above, and, after conditioning and drying, immerse it in **AQUAPROOF**. Squeeze off the excess and hang the painting for 48 hours to dry and cure. This will not impair the fabric's softness or lustre. Aquaproof cannot be air mailed because it's solvent based.

**PROCOLOUR SELFFIX DYE RANGE**

NB. SELFFIX COLOURS THAT SHARE THE SAME NAME AS STEAMFIX COLOURS ALSO LOOK SIMILAR SO SEE THE 'MAIN COLOUR RANGE' TO REFERENCE ACTUAL COLOURS.

NAME	POWDER DYE/LITRE	LIGHTFASTNESS	WASHFASTNESS
1.LEMON	30g	GOOD	GOOD
2.SUN	40g	VERY GOOD	GOOD
3.GOLDEN	30g	VERY GOOD	GOOD
4.ORANGE	40g	VERY GOOD	GOOD
5.BRICK	50g	GOOD	GOOD
6.SCARLET	40g	VERY GOOD	GOOD
7.RED	40g	FAIR - GOOD	GOOD
8.CARMINE	40g	VERY GOOD	FAIR
9.FUCHSIA	40g	FAIR - GOOD	FAIR
10.BURGUNDY	40g	GOOD	FAIR
11.CYCLAMEN	50g	FAIR	GOOD
12.PURPLE	50g	GOOD	GOOD
13.VIOLET	50g	GOOD	GOOD
14.BLUE	40g	VERY GOOD	GOOD
15.CYAN	30g	GOOD	FAIR - GOOD
16.NAVY	50g	GOOD	GOOD
17.TURQUOISE	30g	GOOD	FAIR
18.LAGOON	30g	GOOD	FAIR
19.BOTTLE	40g	VERY GOOD	GOOD
20.GRASS	40g	GOOD	GOOD
21.LIME	30g	GOOD	GOOD
22.OLIVE	30g	VERY GOOD	GOOD
23.BULLION	30g	VERY GOOD	GOOD
24.BROWN	30g	VERY GOOD	GOOD
25.GINGER	30g	VERY GOOD	GOOD
26.CHOCOLATE	30g	VERY GOOD	GOOD
27.BLACK	30g	GOOD	GOOD

**LIQUID SELFFIX DYE PRICES (NZ \$)**

NB. SAME PRICE FOR ALL COLOURS. (FOR LIQUID DYES 1ml = 1cc = 1g)

250ml	500ml	1 litre
\$12.00	\$20.00	\$35.00

**POWDER SELFFIX DYE PRICES (NZ \$)**

NB. SAME PRICE FOR ALL COLOURS. FIRST COLUMN POWDER QUANTITIES VARY FROM COLOUR TO COLOUR BECAUSE EACH POWDER AMOUNT IS EXACTLY CORRECT FOR MAKING 1 LITRE OF LIQUID DYE. THIS IS FOR THE CONVENIENCE OF THOSE WITHOUT WEIGHING SCALES

30 – 50g	100g	250g	500g
\$18.00	\$30.00	\$65.00	\$120.00