

Textile screen inks from Thermofax Screens are water-based textile inks designed for use on a wide range of natural and synthetic fabrics. They can also be used on paper.

### Properties of textile screen inks:

- Available in brilliant transparent colours (plus opaque white)
- Inks are non-bleeding and intermixable to give an infinite variety of colours (they will not separate after mixing)
- High quality intense colours make them economical to use (they will still give brilliant colours even when considerably extended with transparent extender base)
- High quality inks minimise stiffening and provide a soft handle
- Inks are water-based and free from solvents (and therefore considered to have less impact on the environment)
- Screens and squeegees are easily washed with water
- Printed fabric is heat cured with a dry iron (temperature and duration depends on heat resistance of fabric). Printed paper does not need to be heat set.
- Good fastness to light when fully heat cured
- Excellent wash and dry clean resistance when fully heat cured
- Good rub resistance when fully heat cured
- Free from chemicals toxic to health
- Free from lead and other heavy metals
- Do not contain ozone depleting chemicals
- The inks are the right consistency for screen printing. **Please note** that opaque white is much thicker than the other inks – if it feels too sticky you can loosen it a little with extender base or even water to make it easier to print. To use the inks for fabric painting, dilute with water to the desired consistency.

### Choosing your cloth

Cottons, silks, linens, viscose, poly-cottons, polyester, nylon and other synthetic fabrics are all suitable. If in doubt test fabric with a small amount of ink first. Wool can also be used but may not be wash fast.

Inks sit on the surface of the fibres rather than penetrating the fibres as dyes do. Nevertheless, textile screen inks have good qualities of light- and wash-fastness and are also highly rub resistant.

Screen inks can be used on pre-dyed or plain fabric but inks may not show up well on dark fabrics due to their transparent nature (unless mixed with white). Fabric printed with screen inks can also be over-dyed – the colour of the ink should stay fairly true but if the inks are very transparent, strong dye colours may affect how they appear.

Colour values are influenced by the fabric you are printing on – using the same colour screen inks can give different results on different fabrics.

### Using the inks with thermal screens

Stir before use.

To mix colours, put spoonfuls of your chosen colours into a separate container to avoid contamination of original colours. Mix enough for the project you have in mind or make notes of the proportions in case you need to replicate the colour. Mixed colours can be stored for future use in an airtight container. Small plastic lidded food containers are suitable for this.

Colours can be made more transparent by mixing with transparent extender base. All screen inks stiffen the fabric to some extent and particularly if they are thickly applied. However, Thermofax Screens textile screen inks are high quality and highly pigmented so less ink is needed to give brilliant colour and this helps to minimise any stiffening.

Make sure your print surface is smooth as any creases will leave their mark on the fabric. Two layers of acrylic/polyester felt, stretched and stapled over some plywood will make a very stable print surface but you could improvise by taping felt or an old blanket to your table. Cover the print surface with a drop cloth and pin the dry fabric (ironed or un-ironed according to the effect you are trying to achieve) around all edges at approximately 2" intervals.

Position the screen on the fabric, spoon a 'bead' of the screen ink onto the top edge of the screen and, using a lightweight squeegee, draw the ink towards you across the screen. Carefully lift the screen (for more detailed instructions on printing surfaces, squeegees, technique etc. see Thermofax Screens - use and care).

Layers of different colours can be printed onto the fabric without heat setting between each layer. You can work wet-on-wet but the results may not be apparent until the inks are dry so you may prefer to wait for each layer to dry before overprinting. If you are waiting for layers to dry, you will need to wash the screen between layers - if the ink dries in the screen it will permanently damage the screen

Once you have finished printing, wash screens and squeegees and leave the printed fabric to dry. You can leave it in situ or hang it in sunlight.

Leave the fabric to air-cure for 24 hours after printing and then heat set with a dry iron – no steam. Set the iron to a temperature suitable for the type of fabric. A pressing cloth or baking parchment can be used to protect the fabric. Take your time - it will take about 10-15 minutes to heat set about 1 metre of fabric. Iron the front and the back of the cloth.

If desired, the fabric may be washed after heat setting but wait for a week (two weeks for pearlescent inks) before washing to give the inks/paints time to settle into the fibres. If the fabric is destined for something that will never be washed, you can choose not to wash it at all. Sometimes washing will soften the hand of the fabric.

#### **Storage of textile screen inks and safety information**

1. Store textile screen inks in a cool, dry place in sealed containers.
2. Keep away from direct heat and sunlight.
3. Keep inks away from foodstuffs and beverages.
4. Textile screen inks are low odour. You should work in a well-ventilated room but it is not necessary to wear a mask.
5. Small quantities of diluted ink (eg the waste from washing the screens and squeegees) can be safely disposed of in domestic sewerage systems.
6. Textile screen inks should be kept away from ignition sources.
7. After skin contact, wash with soap and water and rinse thoroughly.
8. Do not swallow inks or allow them to come in contact with eyes.

#### **Visit the website to:**

- Buy thermal screens from our extensive design library
- Order custom screens made from your own designs
- Buy water-based textile screen inks and lightweight squeegees