



Textile screen printing inks
for the eco-friendly professional

TEXISCREEN PERMATONE CO

Product Information Sheet

Texiscreen Permatone CO is a water-based 100% solvent free textile ink, designed for direct wet-on-wet printing on a wide range of natural and synthetic fabrics. Heat cured, the unique formula offers an unsurpassed balance of colour brightness, softness and durability to wash, rub and dry-clean, eliminating the need for additives. Permatone CO also has excellent screen stability allowing exceptional screen open time.

Texiscreen Permatone CO has a matching system which is PANTONE® approved enabling the system to produce simulations of the 950 PANTONE® colours.

As a water-based product, equipment is easily cleaned with water. After heat fixing, prints exhibit excellent wash, rub and dry-clean resistance.

Important: Stir well before use. Compatibility with all substrates must be checked before commencing a production run.

Main Characteristics

Drying	Thinning & Wash-up	Mesh Range	Stencil Type	Coverage & Mesh No.	Applications	Fabrics	Colour Range
For optimum fastness Permatone CO should be heat cured.	If necessary, thin with up to 5% water. Dried in ink may be washed out with CPS KA or A8 Screenwash.	Mono-filament 43-62T. With practice, 120T can be used for wet-on-wet printing	Should be water resistant. Emulsion: Recommend Dirasol 916, KIWO Polyplus SRX.	15-21m ² /L with 62T mesh.	T-Shirts. Flags. Banners. Sports and Fashion Wear. Scarves. Swimwear. Upholstery and Window Furnishings.	Cotton. Cotton/ Polyester blends and most synthetic fabrics. The fastness to wash and dry cleaning on wool may be diminished.	9 Permatone Colours plus Black, White, and Extender Base.
Properties Matt Finish. White spirit free. Low odour. Intermixable, light fast, non-bleeding colours. Brilliant transparent shades. Soft handle. Excellent wash and dry clean resistance. Ironable.				Product Resistance After heat curing, prints exhibit very good resistance to wet/dry rub.			

Drying and Curing

For optimum wash and colour fastness, prints should be fully heat cured. Whilst the below information is a guide, the curing schedule used should be chosen to suit the heat resistance of the fabric being printed. Care must be taken with IR dryers to ensure prints are fully cured. When printing on synthetic blends and fabrics, the lower curing temperature and longer drying time is recommended. If your drying conditions fall outside these recommendations, please contact your local Permatone CO representative for technical assistance.

The following curing guidelines are recommendations for ink deposit temperatures, not dryer temperatures. This should be checked with temperature strips to ensure the appropriate temperatures are achieved.

2-3 Minutes @ 160°C (355°F)
5-6 Minutes @ 140°C (285°F)
8-9 Minutes @ 120°C (250°F)

Fastness

Light Fastness is good. No colours yield less than 6 on the Blue Wool Scale and most are the full 8/8. Fully heat cured prints have excellent wash and dry clean fastness.

Colour Matches: Note that high temperatures combined with strong detergents can cause colour changes in some colour matches. It is therefore imperative that all formulations are checked for acceptable wash fastness properties prior to production.

Rub Resistance

After heat curing, prints exhibit very good resistance to wet/dry rub.

PANTONE® Matching System

The Permatone CO range contains an approved PANTONE® matching system. It comprises of 9 base colours, plus Black, White, and Extender Base that are used to produce simulations of the 950 PANTONE® colours.

The PANTONE® Colour Matching System includes:

1. PANTONE® Formula Guide
2. Sericol Formula Guide
3. Sericol Colour Manager Software
4. PANTONE® Scale

Standard Colours

Permatone CO

CO001 Black
CO021 White
CO046 (s) Yellow RS
CO057 (s) Yellow GS
CO103 (s) Orange
CO122 (s) Red YS
CO132 (s) Violet
CO153 (s) Red BS
CO154 (s) Magenta
CO218 (s) Blue
CO316 (s) Green
CO381 Extender

Available in 1L, 4L and 15L containers.
CO381 also available in 30L and 200L pack sizes on a 'made to order' basis.

(s) = Base Colours

Ancillary Products

During printing fabrics must be held in place by means of a pressure sensitive adhesive so that good definition is obtained and registration ensured. Permaset Table Adhesive and Permaset Belt Adhesive are suitable for this purpose. Manual operations can also use spray adhesives, but these are not recommended for environmental reasons.

Safety and Handling

Permatone CO has been formulated to be free of any toxic chemicals. The range does not have a flash point and as such is exempt from Flammable Liquids regulations. Permatone CO is also free from Lead and other heavy metals. Permatone CO also complies with Oekotex Class 2. Comprehensive information on the safety and handling of products in the Permatone CO range of inks and ancillaries is provided in the appropriate Material Safety Data Sheet (MSDS) which is available on request.

Environmental Information

Permatone CO does not contain ozone depleting chemicals such as CFC's and HCFC's. It is also formulated free of aromatic hydrocarbons and is free of any volatile solvent. Permatone has been granted approval by the UK Soil Association, having successfully met the requirements of the Global Organic Textiles Standards (GOTS) for non-organic chemical inputs for use in organic textile processing.

Storage

Containers should be kept in a cool place and tightly closed when not in use.
Excess ink from the screen should be disposed of in accordance with local regulatory authorities

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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 fully meet 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.