

# Technical Information

Screen Inks | Textile Printing



## TEXTOPLAST TAQ

High Opaque, Eco - friendly, OEKO TEX Certified

**Water based Textile Screen Inks ready to use for Cotton, Polyester, Cotton Polyester Blends, Linen etc**

### Application

TEXTOPLAST TAQ is the range of high opaque water based textile inks to print onto both dark and light fabrics like cotton, cotton blends and linen

### Characteristics

- Suitable for Automatic, Semi - Automatic & Table printing
- Excellent crack resistance and wash fastness
- Soft hand feeling and smooth print finish
- Brilliant colours with extra opacity
- Lead free – suitable for children's garments
- Excellent screen stability – no chocking/clogging of screen
- Based on eco - friendly resin system

### Printing conditions

**Screen mesh** – recommended 40 to 300 mesh/inch (18 to 120 mesh/cm) or finer mesh depending on the type of job. For heat transfers, 90 to 150 mesh/inch (35 to 60 mesh/cm) gives the best result

**Squeegee** – soft or medium hard polyurethane squeegee.

**Stencil** – all water resistant stencil making emulsions and stencil making films are suitable

### Curing Procedure

TEXTOPLAST TAQ inks can be cured at 150 - 155°C for 2 to 3 minutes to achieve full wash fastness.

Flash curing - The curing time required for flash curing depends upon the type and wavelength of the source and its distance from the print. The curing time also depends upon other factors such as fabric, ink colour, thickness of the ink film and the area of the print, etc

### Range

TEXTOPLAST TAQ Matching System - Almost any shade can be matched by mixing the selective inks of the matching system which comprises of the basic shades as follows

Match Light Yellow	TAQ - 10101	Match Violet	TAQ - 10141
Match Mid Yellow	TAQ - 10102	Match Ultra Blue	TAQ - 10151
Match Deep Orange	TAQ - 10111	Match Deep Blue	TAQ - 10152
Match Scarlet Red	TAQ - 10121	Match Green	TAQ - 10161
Match Carmine Red	TAQ - 10122	Match Tinting White	TAQ - 10171
Match Magenta	TAQ - 10131	Match Tinting Black	TAQ - 10181
Mixing Clear Base	TAQ - 10191	Mixing Extender Base	TAQ - 10192

## Spot Colours

Bright Yellow	TAQ - 10201	Reflex Blue	TAQ - 10253
Light Orange	TAQ - 10211	Yellow Green	TAQ - 10261
Vermilion	TAQ - 10221	Grass Green	TAQ - 10262
Brilliant Red	TAQ - 10223	Forest Green	TAQ - 10263
Purple	TAQ - 10241	Opaque White	TAQ - 10271
Sky Blue	TAQ - 10251	Brilliant White	TAQ - 10272
Royal Blue	TAQ - 10252	Dense Black	TAQ - 10281

## Process Colours

Cyan	TAQ - 10401
Magenta	TAQ - 10402
Yellow	TAQ - 10403
Black	TAQ - 10404

By adding Clear Base TAQ - 10191, the ink density can be reduced. The ink density can be increased by adding ink concentrates for the process colours in required proportion or by using a coarser mesh

## Fluorescent Shades

Lemon Yellow	TAQ - 501
Golden Yellow	TAQ - 502
Orange	TAQ - 511
Red	TAQ - 521
Magenta	TAQ - 531
Green	TAQ - 561

## Specialty Inks

Mica Metallic	
Rich Gold Mica Metallic	SH - 861
Rich Pale Gold Mica Metallic	SH - 862
Silver Mica Metallic	SH - 864
Mica Metallic Binder	TAQ - 10195

## Auxiliaries

Reducer - TEXTOPLAST TAQ inks are water reducible.

Retarder Gel - TAQ - 902 can be added up to 5 - 10% to make the ink slow drying to prevent screen clogging.

Catalyst TAQ - 10601 can be added to enhance the air - drying time as well as fastness of ink on synthetic fabrics with a pot-life of 6 - 8 hours of the mixture of ink& catalyst.

Thickener TAQ - 10904 - Can be added up to 0.5 to 1% to increase the viscosity of the ink.

Softening Agent TAQ - 10905 - Can be added up to 2 - 5% to making the print silky & soft - hand feel.

To improve the crock resistance, Clear Base TAQ - 10191 can be added up to 5 - 10%.

## Note

- It must be ensured that the entire thickness of the ink film is given enough time to reach the cure temperature to achieve the desired resistance properties
- The cure schedule must be evaluated by testing the print for the desired wash schedule
- Test compatibility of Textoplast TAQ inks with specific fabrics and the desired resistance properties before commencing production run
- Always test curing, adhesion, cracking, washing and other requirements before commencing production run
- Prints may be ironed from the back of the fabric at a cool setting, with a cloth over the printed area  
Prints will not resist dry-cleaning and garments should be marked to this effect
- Due to variation in the fabrics and the ink film thickness, slight colour variation from the actual ink shade is unavoidable

**Note** - This information is compiled based upon field experience and extensive laboratory testing. However, customers are requested to satisfy themselves that the products meet their requirements in all respects before starting a print run. Since the printing conditions are not under our control, no guarantee can be given for their performance.