Screen Printing Ink

Heat setting textile printing ink for direct printing on textiles, can be diluted with water, resistant to washing, smooth handle

Marabu

Texaprint TXT

For textiles made of natural and synthetic fibres

Field of Application

Substrates

Textiles made of cotton and other natural fibres as well as blended fibres with a high percentage of natural fibres.

Any water absorbent finish on the textile also has an absorbing effect to the printed ink film. The print will therefore not adhere on such a finish. If such a textile still needs to be printed, the finish must be removed prior to printing to obtain the best possible ink adhesion on the textile.

Since all the print substrates mentioned may be different in printability within an individual type, preliminary trials are essential to determine suitability for the intended use.

Field of Use

Texaprint TXT can be used on almost all natural or blended textile substrates. It's especially suitable for direct printing on garments, such as T-shirts and on household articles such as table cloths or towels, but also for the printing of embroidery patterns.

We recommend to use fabric sizes between 36 and 48 T (metric), although alterations from this recommendations to coarser or finer fabrics are possible depending on the printing job (motif, colour of the textile, etc.). Finer fabrics can, however, also be used, depending on the type of weave and the nature of the textile.

As customary in textile printing, the ink should be contact printed.

Characteristics

Drying

Dries rapidly by evaporation of solvents at room temperature within 15 - 20 minutes. Drying can also be combined with heat setting which will be described now.

Heat setting

In order to obtain best properties (resistance to washing up to 60°C and to dry cleaning) the printed surface should be heat activated. For this purpose the printed motif should be exposed to the highest possible temperature of 150° C which can be obtained by the use of hot air, by IR radiation or by indirect contact with hot surfaces such as irons or iron presses. Heat setting time should be 5 minutes. The whole surface must be exposed to the necessary temperature during the time mentioned above. We recommend to heat set sensitive fabrics from their reverse side or to put a parchment paper on the surface which is to be cured.

Strongly absorbing textile fabrics and large surfaces might demand a prolongated time of heat setting. If the productions speed is to be increased, the curing can be effected at 170 to 180° C for approximately 2 min. If the print is still wet, when cured, the previously indicated times are increasing by approximately 1 min.

Fading resistance

We are using pigments of an excellent fading resistance for all shades of our Texaprint TXT ink type.

Semi-transparent shades mixed by adding transparent base especially by admixing White to the shades, will mostly reduce the fading resistance according to the mixing ratio. The fading resistance of the ink is also reduced, of the density of the printed ink film decreases.

Stress Resistance

Textiles printed with Texaprint TXT have a smooth and elastic handle. After proper and thorough heat setting the print is ready to be handled and will stand machine-washing, subject to variations that will depend on the type of textile material (type of fibre, absorption capacity and finishing). Prints on textiles with parts of synthetic fibres do not reach the same resistance to washing as prints on pure cotton fibres. Handle and folding properties of the textile fabrics are hardly or not affected at all.

It is known from practical experiences that properly set prints on blended cotton fabrics are resistant to halogenised hydrocarbons as employed in dry-cleaning.

Heat-setting may be waived on pure linen and cotton fabrics. The prints will nevertheless be suitable for washing to a certain degree. The resistance of non-heatset prints will increase with the length of time allowed between printing and the first wash but they will not reach the full values of heat-set prints. Prints that have not been heat set should not be washed for the first time before 14 days after printing. Some printing companies recommend their clients to iron the print before washing it for the first time.

Range

Shades (available in 1 ltr. tins)

Compare "Shade Card for Textile Screen Printing Inks"

TXT	20	Lemon	TXT	57	Brilliant blue
TXT	21	Medium yellow	TXT	59	Royal blue
TXT	23	Red orange	TXT	62	Medium green
TXT	32	Carmine red	TXT	68	Brilliant green
TXT	36	Vermilion red	TXT	73	Black
TXT	45	Brown	TXT	170	Opaque white

Texaprint TXT

The colours have a medium opacity and should therefore be mainly used for printing on white or light-coloured fabrics. Colour TXT 170 has, however, an excellent opacity to print even on black textiles. It is possible to mix TXT 170 Opaque white with other colours.

By adding Texacolor tinters TXR, the above mentioned shades can be intensified or blended.

For 4-colour-process-prints the following shades can be supplied:

TXT 429 Process-Yellow
TXT 439 Magenta
TXT 459 Cyan

Additives

TXTT Transparent base

Auxiliaries

Thinner: water
Cleaner: water or textile universal cleaner TXUR

The screen can usually be cleaned with water only immediately after printing. We recommend our water soluble special cleaner TXUR (especially developed for textile materials) for an ink that has partially dried out.

Fabrics and Stencils

We recommend to use Polyester fabrics, since they are generally the best suited ones for printing with water based inks.

All water-resistant products can be used as material for stencils.

Labels

For our ink type Texaprint TXT and its additives and auxiliaries there are current Material Safety Data Sheets according to EC-regulation 91/155, informing in detail about all relevant safety data including the labelling according to the present EEC regulations as to health and safety labelling requirements. Such health and safety data may also be derived from the respective label.
The TXT ink and its auxiliaries - with the exception of TXUR - are water-based and therefore not considered as flammable liquids.

Shelf-Life

Texaprint TXT carrier is not subject to a particular limitation of its shelf-life in comparison to conventional screen printing textile inks.
As the ink contains water it must be protected from frost. Once frozen, the ink cannot be used anymore.
We recommend to close tightly any opened cans.

Note

Our technical advice whether spoken, written, or through test trials corresponds to our current knowledge to inform about our products and their use. This is not meant as an assurance for certain properties of the products nor their suitability for each application. You are, therefore, obliged to conduct your own tests with our supplied products to confirm their suitability for the desired process or purpose. Please refer to the information in our technical data sheets regarding screen printing inks.
The use, application and processing of the products are outside our control and are therefore exclusively your responsibility. Should, however, any liability claims arise, such claims shall be limited to the value of the goods delivered by us and utilised by you with respect to any and all damages not caused intentionally or by gross negligence.