Mara® *Tex* STS

Silicone Screen Printing Transfer Ink for sportswear and tagless textile decoration applications

Good opacity, High stretchy, Excellent wash resistance, Oeko-Tex 100 and REACH compliance

Field of Application

Mara® *Tex* STS is excellently suited for most knitted and woven fabrics typically used for T-shirts, Sweat Shirts, Sports and Fashion Wear, Badges, Hats and Caps, Travel Bags, Footwear.。

Formulated on non-PVC containing resins and non-phthalate plasticisers. Lead-free, unprecedented stretch properties, superb screen stability, excellent wash resistance and dye bleed resistant options.

Fabrics

Suitable for most common natural and synthetic fibres, including, Cotton and Cotton/Polyester blends. Many grades of synthetics.
Use STS-LBB Low Bleed Black onto most sublimated fabrics

Substrate

PET heat transfer film or heat transfer paper for silicone ink.

Drying

Every STS Silicone Ink layer should be dried at 80-90ºC for 1 - 2mins before overprinting. Many factors affect the dwell time required for drying including ink film thickness, colour, image size and drying equipment, all influence the drying schedule needed. Every layer should be dried at minimum temperature and dwell time. Never over-cure each layer before printing next, or delamination of the layers will be seen.

Powdered prints are recommended to heat cure to maximise print & wash performance, suggested cure temperature is not less than heat melt temperature of powder for 1 - 3mins.

Characteristics

Ink Adjustment

The ink should be stirred homogeneously before printing.
For maximum resistances are required, hardener should be added before use. Estimate the amount of ink required for 2–3 hours work and thoroughly mix the ink base and hardener in the recommended ratio.

The ink/hardener mixture is chemically reactive and must be processed within 6 hours. If the mentioned times are exceeded, the ink's adhesion and resistance may be reduced even if the ink still seems processable. All the catalysed ink left over at the end of the printing run must be discarded.

Thinning

Supplied press-ready. Up to 5% thinner may be added if necessary. For hot-shop conditions, retarder may be added to maximize print performance and screen stability.

Wash-up

Wash up with solvent.
For dried in ink – wash up with solvent.
Soaking and adding solvent to wet ink should be avoided.

Fastness

The full wash fastness of the system is dependent on the adhesive and base used. Generally 50x domestic wash fastness is achievable with STS ink series.
As with all transfer recommendations – it is vital to ensure suitability on the Customer supplied fabric. Due to variation in fabrics and even between batches of fabrics, full compatibility testing should be conducted prior to commencing production.

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Please note that moisture content in the substrate has an influence on transferability (fabric can absorb up to 30% moisture).

Range

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Main Colour Range and Bases

170	Opaque White
904	Special Binder
LBB	Low Bleed Black
970	Fine Line White

Fluorescent and Metallics

320	Fluorescent Yellow
323	Fluorescent Orange
333	Fluorescent Pink
336	Fluorescent Magenta
321	Fluorescent Red
364	Fluorescent Green
193	Rich Gold
191	Silver

Powder

P	Powder

	Melting Temp.	Transfer Temp.	Wash Fastness
P	120ºC	130 - 140ºC	60ºC

Auxiliaries

STSV	Thinner	Up to 5%
STSR	Retarder	Up to 1%
STSH	Hardener	2%

Thinner is added to the ink to adjust the printing viscosity. For slow printing sequences and fine motifs, it may be necessary to add retarder to the thinner
The mixture ink/hardener must be stirred well and homogeneously. The mixture ink/hardener is not storable and must be processed within pot life. All the mix ink/hardener left over at the end of the printing run must be discarded.

Pigment Concentrate

680	Black
620	Lemon
624	Medium Yellow
626	Orange
630	Vermilion
650	Violet
634	Carmine Red
636	Magenta
656	Brilliant Blue
654	Medium Blue
660	Blue Green

All color inks of this series can be mixed, please avoid mixing with other series of inks to ensure the performance of the ink.

Printing Parameters

All types of commercially available fabrics and water resistant stencils can be used. We recommend using 62-120 lines/cm for printing ink.

Shelf Life

Shelf life depends very much on the formula/ reactivity of the ink system as well as the storage temperature. The shelf life for an unopened ink container if stored in a dark room at a temperature of 15 - 25 °C is 1 to 2 years.
Under different conditions, particularly higher storage temperatures, the shelf life is reduced. In such cases, the warranty given by Marabu expires.。

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. The forego-

ing information is based on our experience and should not be used for specification purposes. All characteristics described in this Technical Data Sheet refer exclusively to the standard products listed under "Range", provided that they are processed in accordance with their intended use and only when used with the recommended auxiliaries. The selection and testing of the ink for specific applications is exclusively your responsibility. Should, however, any liability claims arise, they 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.

Labelling
For Mara®*Tex* STS and the auxiliaries, there are current Material Safety Data Sheets available according to EC regulation 1907/2006, informing in detail about all relevant safety data including labelling according to EC regulation 1272/2008 (CLP regulation). Such health and safety data may also be derived from the respective label.