

Scheda Tecnica

TOUCH KEY GRAPHIC INKS FOR HI-TECH APPLICATIONS

T.I.L. No. 274

The Touch Key range of graphic inks has been specifically formulated to meet the needs of the Membrane Touch Switch and Automotive markets.

A single-pigment base range enables fast, accurate, bright colour matchings to be achieved. The inks are also suitable for use with instrumental colour measurement systems.

A range of both dye- and pigmented-based LED filter colours is included, featuring maximum clarity and excellent light transmission characteristics.

Specifically formulated Opaque White and Dense Black are included in the colour range for use where maximum opacity is required.

Excellent performance is achievable with the majority of substrates in use in the MTS and Automotive markets. The Touch Key range has been extensively tested on all the commonly available grades of polycarbonate, polyester (print receptive) and blended hybrids. They exhibit both the excellent adhesion and the flexibility demanded by the long life of membrane touch switches and automotive decals.

The inks have also been shown to withstand normal embossing procedures and are therefore suitable for use in the production of tactile membrane overlays.

COLOUR RANGE

The Touch Key range comprises ten translucent base colours; six transparent LED colours available in either dye or pigment form together with Dense Black, Opaque White and translucent and transparent mediums, allowing easy mixing of tint colours.

Primrose Base Yellow Orange	26-1218 26-1219	Basic Blue Basic Green	26-5239 26-6237
Mid Red Magenta	26-2223 26-3241 26-4217	Blending Black Blending White Dense Black	26-7262 26-8245 26-7208
Violet Translucent Base	26-4218 26-9208	Opaque White Transparent Base	26-7208 26-8229 26-9207

Continued Overleaf



TRANSPARENT INKS FOR LED DISPLAYS

The Touch Key transparent range is available in both dye- and pigment-based versions and offers excellent clarity and maximum light transmission. The pigmented range is offered to overcome "show-through" problems when using a transparent ink in combination with a tinted or pale background colour.

TECHNICAL DATA AND WORKING ADVICE

SUBSTRATES

These inks have been carefully evaluated in conjunction with leading substrate manufacturers on most types of plastic film used in the production of membrane switches. It is, however, always advisable to assess suitability on the actual batch of material to be used prior to commencing a print run.

PRINTING MACHINERY

These inks are suitable for all types of screen printing equipment. They give excellent results on fast, fully automatic flat bed or cylinder machines fitted with jet dryers and on hand frames where screen stability is important. The inks also perform well on reel to reel machinery.

PRINTING MATERIALS

90-120 threads/cm monofilament meshes, together with medium hardness (65-75° shore) polyurethane squeegees are recommended. Most types of photographic stencil can be used; Coatesline Regular capillary films and Coatazol Emulsions are particular recommended.

INK ADJUSTMENT

Reduction with up to 25% of either Thinner 26-0202 or Retarder 26-0204 is recommended, depending upon machine conditions.

DRYING

All these inks offer an excellent balance of good screen stability and rapid drying. Drying speeds of 20-30 seconds at $80-90^{\circ}$ C can be achieved using jet dryers.

WASHING UP

Universal Screenwash 11-00 is recommended for washing up at the end of a print run.

COVERAGE

A coverage of approximately 45-55m²/kg can be expected, providing standard thinning to mesh recommendations are followed.

PERFORMANCE DATA

The Touch Key range of graphic inks has been tested in accordance with the following specifications:

1. Chemical Resistance

These inks have been evaluated for chemical resistance using a 50 cycle rub test and have been found to exhibit good resistance to the following chemicals: