



TECHNICAL DATA SHEET

1. **IDENTIFICATION OF SUBSTANCE**

KROMAGEN THERMAL INKS AND CONCENTRATES

Use:	Thermal Ink
Manufacturer / Supplier:	Thermographic Measurements Ltd Riverside Buildings, Dock Road, Connah's Quay, Flintshire, CH5 4DS
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2. **DETAILS**

Kromagen inks are an irreversible colour change water based ink. They are supplied at approximately 44% solids with a viscosity between 45 and 60 seconds on a B4 Cup @ 25C for flexo and 2000-3000cps for screen inks. The pH of the ink is slightly alkaline and at start of printing will be 7-8 pH.

Pigment concentrates are dispersions of the reactive pigments in an acrylic solution having good compatibility with many typical water based varnishes or ink systems. Pigment content is approximately 39 – 41% solids.

The SG of inks and concentrates is between 1.0 and 1.1.

Demineralised water may be used to thin the ink and clean up. A 50 / 50 mix of water and isopropyl alcohol can also be used for thinning.

On no account should other solvents be used. Exposure to organic solvents may cause an irreversible colour change. Dry prints will also be damaged by solvent exposure.

The ink is suitable for use on paper and print receptive plastics. For screen printing a water proof stencil should be used. Mesh size from 77T to 125 / 150T may be used depending on final colour strength required.

Colour formation is from off white to named colour. A faint colour change starts to occur at approximately 10 -30°C below the rated temperature (depending on type). A distinct colour change is seen at the rated temperature and full shade is seen between 10-20°C above the rating (depending on type). Prints exposed to less than 90C may show a fading of the developed colour on standing. Individual colour change plots against temperature may be available.

This type of ink produces a strong colour change which intensifies when removed from heat. The ink is best suited to short periods of temperature exposure. Prolonged exposure to elevated temperature will eventually cause the colour development to fade.

Compatible water based varnishes may be used to give good scratch resistance as abrasion can mark the Kromagen by causing colour development.

The information on this Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication. The company do not accept any liability for any loss, damage or injury resulting from its use (except as required by law).

