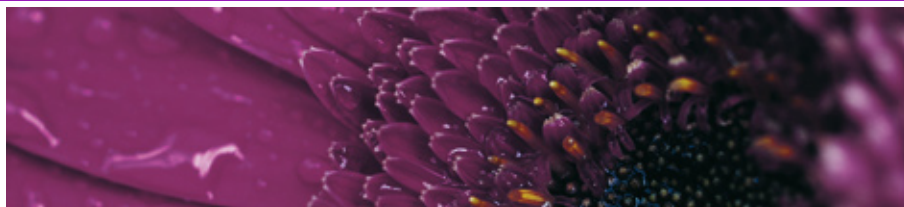




PRODUCT GROUP 500

Series 560-T31-xx/05

UV-Thermochromic Inks



Thermochromic inks are effect coatings which are changing their color from colored to clear, depending on ambient temperature. This process is reversible that means, it can be repeated as many times as desired. The color change takes place at a temperature of approx. 31°C (+/- 3°C).

Thermochromic inks are mainly conceived for indoor use. Outdoor use is limited and therefore, thermochromic printings should be lacquered with a protection varnish. A further **MUST** for lacquering with a protection varnish is the well known limited light fastness of the thermochromic pigments. It is therefore recommended to use the solvent based protection varnish Series 3880 5700 or the UV-curable protection varnish Series 560 5700. Thermochromic inks should not permanently be exposed to temperatures in the range of the color change, because this would inevitably result in an aging process which would reduce lifetime of the reversible, thermochromic properties. Thermochromic inks are not absolutely opaque, so that the substrate coatings are to be set to the effect color system. Printing of common substrates is normally done with a mesh of 77-55 Y PW PET 1000. Adequate opacity – with strong contrasts – can be reached with a mesh of 43 thread/cm. Please be aware, that no total transparency (100%) can be reached at the color change, because the pigments of the special effects material do have a whitely color because of particle size and therefore cause an optical effect which leaves a slightly milky impression. By means of the aforementioned overprinting with a protection varnish, this effect is reduced to the best.

As a standard, black is being kept on stock. This is the most opaque and the habitually used thermochromic ink (Series 560-T31-33/05). Besides black, red (Series 560 T31 18/05) and blue (Series 560 T31 26/05) are often ordered and they are also available from stock. All other color shades upon request.



DIGITAL



FLEXO



FUNCTIONAL COATINGS



PAD

SUBSTRATES

PVC-Self adhesive foils	Rigid-PVC	Pretreated Polyester	PET-G, PET-GAG
OPP-Laminate	Polystyrene, ABS, SAN	Paper, paperboards, cardboards	Polycarbonate
Polyolefin, coated or pretreated			

USE

Application	Graphical screen printing, partially functional coatings
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PROPERTIES, PROCESSING, DRYING AND MESH

Mesh	43-80 Y PW up to 77-55Y PW PET 1000
Drying / Curing	300-350 mJ/cm ² (Technigraf Integrator)
Further Processing	Punching, cutting, embossing

ADDITIVES

Thinner	Press-ready	Addition Ratio	-
Retarder	Press-ready	Addition Ratio	-



VARIOUS

Delivery Conditions

1 kg / 5 kg / 20 kg

Other

Stir well before use; protect from direct light



Disclaimer

Please thoroughly read the Material Safety Data Sheet (MSDS) prior to processing. The Material safety Data Sheets according to 91/155/EWG form, contain indications of hazardous ingredients. Exposure levels and instructions for precautions when processing, handling and storing as well as first aid. The information given in the MSDS refers to the processing as described within this technical leaflet. Above data are based on laboratory tests and field experience. All therein contained statements are to the best of our knowledge without any obligation from our side and do not discharge from testing the product by yourself. In doubtful cases, you are kindly requested to either perform your own tests or refer to our technical staff. Application, use and processing of the delivered products are beyond our control and are therefore at your own risk and responsibility. Printcolor is thus free from any guarantees or liabilities. In cases of justified complaints, Printcolor can only be made liable for the counterpart of the utilized ink system. Adding not stated products or foreign / competitors products, is solely at your own risk and liberates Printcolor of any later calls; especially in cases when damages occurred and which have been caused through use of products of foreign type. This leaflet replaces all former issues. (01/2009)



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