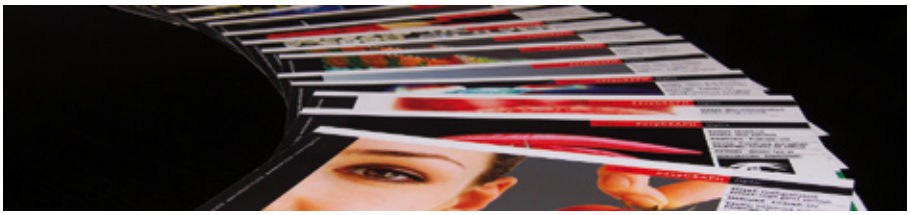
printcolor
high performance inks

PRODUCT GROUP 500

Series 590-T31-xx/05

UV-Thermochromic Inks



The temperature active systems are specially, interactive effect coatings which are changing their color from colored to clear; depending to the ambient temperature. This process is reversible, i.e. it can be repeated as many times as desired. The color change typically happens in the range of around 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 320-5700 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.

Usually, black thermochromic inks are preferred because they are providing the best substrate coverage at lowest price. 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.

Besides black (Series 320-T31-33/05), which is being kept on stock, blue (Series 590-T31-26/05) and red (Series 590-T31-18/05) are very often used in practice. Other colors shades are available on request, however rather unusual. Furthermore, color changing temperatures of minus 15°C up to 65°C can be adjusted.

DIGITAL

FLEXO

FUNCTIONAL COATINGS

PAD

PREPRESS

SCREEN

SUBSTRATES			
PVC-Self adhesive foils	Paper, paperboards, cardboards	Offset pre-prints	OPP-Laminate

USE	
Application	Graphical screen printing, partially functional coatings
	Suitable for example for interactions on flyers, brochures, advertising campaigns, packaging's, games, a. s. o.

PROPERTIES, PROCESSING, DRYING AND MESH	
Mesh	43-80 Y PW up to 77-55 Y PW PET 1000
Drying / Curing	300-350 mJ/cm² (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