



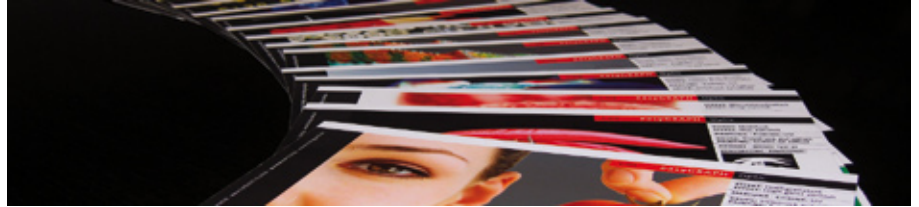
## PRODUCT GROUP 500

### Series 590-PEQxx

UV-Phosphorescent Inks, Economy Quality

### Series 590-PHQxx

UV-Phosphorescent Inks, Security Quality



The luminescent (after-glowing) settings of ink Series 590-PEQxx, respectively ink Series 590 PHQxx belong to the functional group of luminous ink systems. The therein contained functional substances are induced in their stimulation center by means of artificial, respectively daylight and brought to a higher energy level. Those induced areas consist of foreign atoms which are built into the crystals of the phosphorescent pigments. The longer and the more intense the stimulation is, the higher is the gain of light. However, as soon as saturation is reached, no further charging is possible. After this "storage procedure", the electrons are beginning to fall back into their original position and are therewith reflecting energy in form of visible light.

The settings of Series 590-PEQ00 have a special feature which differ them significantly from common products on the market. It is the uniquely white body color! This latest development allows an almost contrast-free, visually neutral pre-printing; ideal for over-printing with process- and transparent inks, also in Offset processing.

Fact is, that no chemical reaction occurs during a "charging", respectively "discharging" cycle and therefore, Series 590-PEQxx, respectively Series 590 PHQxx theoretically keep their "luminescent-properties" for an unlimited time. A decrease of the light intensity only occurs very slowly and almost unremarkably. Only extended contacts with water or extreme humidity is to be avoided because this would result in a hydroxide layer which would negatively influence the luminous intensity and on a long term basis, destroy the printed layers. However, in the field of print-finishing, such conditions are rarely occurring.

Series 590 PEQxx and Series 590 PHQxx do not contain any radioactively or poisoning ingredients.

Differed are the classifications **PEQ: Economy Quality** and **PHQ: Security Quality**.

PEQ-settings are proven for quick charging and rather short discharge with an intense illumination. Price level is low and applications are typically for acquisition and promotion-/advertising material.

PHQ versions are moderate in charging, however the luminescence is intensive and on long term basis; usually during a whole night. In the field of effect finishing / added value printing, puzzles, stickers, labels and packagings are for example being applied with such systems.

Following articles are available:

- Series 590-PEQ00      Phosphorescent Ink, Economy Quality, white
- Series 590-PEQ47      Phosphorescent Ink, Economy Quality, green
- Series 590-PHQ47/ECO      Phosphorescent Ink, Security-Quality, green
- Series 590-PHQ49/ECO      Phosphorescent Ink, Security-Quality, blue



#### SUBSTRATES

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



#### USE

<b>Application</b>	Graphical screen printing, partially functional coatings
	Suitable for i.e. flyers, brochures, advertising campaigns, packaging, games, a. s. o.



### PROPERTIES, PROCESSING, DRYING AND MESH

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



### ADDITIVES

<b>Thinner</b>	Press-ready	<b>Addition Ratio</b>	-
<b>Retarder</b>	Press-ready	<b>Addition Ratio</b>	-



### VARIOUS

<b>Delivery Conditions</b>	1 kg / 5 kg / 20 kg
<b>Other</b>	Stir well before use (risk of separation); 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)