

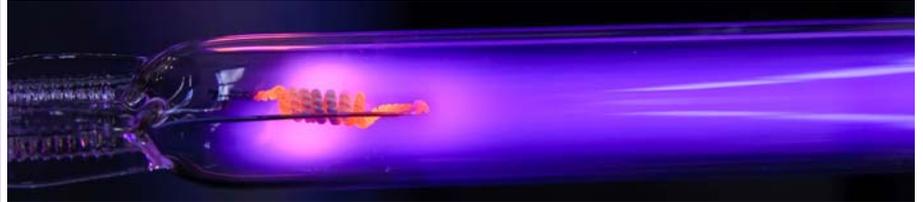
**PRODUCT GROUP 500**

**Series 560-PEQxx**

UV-Phosphorescent Inks, Economy Quality

**Series 560-PHQxx**

UV-Phosphorescent Inks, Security Quality



The luminescent (after-glowing) settings of ink Series 560-PEQxx, respectively ink Series 560 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 560-PEQ00 and Series 560-PHQ05 have a special feature which differ them significantly from common products on the market. It is the white (-PEQ00), respectively the almost clear(-PHQ05) body color! These latest developments allow almost contrast-free pre-printing, respectively over-printing.

Fact is, that no chemical reaction occurs during a "charging", respectively "discharging" cycle and therefore, Series 560-PEQxx, respectively Series 560 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.

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

PEQ systems are proven for quick charging and at the same time quick discharge of the captured energy in the dark. The luminescent intensity is high, however timely limited. Its main applications are typically for acquisition and promotion-/advertising material, puzzles and stickers for indoor use.

The PHQ-settings of higher quality are proven for long term luminescence and fulfill the general norms for emergency exit signs as well as for phosphorescent safety signalizations. Correctly lacquered, these systems are suitable for long term outdoor use.

Series 560 PEQxx and Series 560 PHQxx do not contain any radioactively or poisoning ingredients.

Following articles are available:

|                      |   |
|----------------------|---|
| Series 560-PEQ00     | Phosphorescent Ink, Economy Quality, white      |
| Series 560-PEQ47     | Phosphorescent Ink, Economy Quality, green      |
| Series 560-PHQ05     | Phosphorescent Ink, Security Quality, colorless |
| Series 560-PHQ47     | Phosphorescent Ink, Security Quality, green     |
| Series 560 PHQ49     | Phosphorescent Ink, Security Quality, blue      |
| Series 560-PHQ47/ECO | Phosphorescent Ink, Security-Quality, green     |
| Series 560-PHQ49/ECO | Phosphorescent Ink, Security-Quality, blue      |



**SUBSTRATES**

|                                |             |                                  |                |
|--------------------------------|-------------|----------------------------------|----------------|
| PVC-Self adhesive foils        | Rigid-PVC   | Pretreated Polyester             | PET-G, PET-GAG |
| OPP-laminate                   | Polystyrene | Polyolefin, coated or pretreated | Polycarbonate  |
| paper, paperboards, cardboards |             |                                  |                |



## USE

|                    |  |
|--------------------|--|
| <b>Application</b> | Graphical screen printing, promotional material, games, stickers |
|                    | Technical screen printing, escape-route signs                    |

## 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)