

## PRODUCT GROUP 300

### Series 320-PEQxx

Phosphorescent Inks, Economy Quality

### Series 320-PHQxx

Phosphorescent Inks, Security Quality



The after-glowing settings of ink Series 320-PEQxx, respectively ink Series 320 PHQxx belong to the functional group of luminescent 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 320-PEQ00 and Series 320-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) 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 320-PEQxx, respectively Series 320 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. In such cases, a compatible protection lacquering is recommended.

Series 320 PEQxx and Series 320 PHQxx do not contain any radioactively or poisoning ingredients.

Following articles are available:

|                      |   |
|----------------------|---|
| Series 320-PEQ00     | Phosphorescent Ink, Economy Quality, white  |
| Series 320-PEQ47     | Phosphorescent Ink, Economy Quality, green  |
| Series 320-PHQ05     | Phosphorescent Ink, Security-Quality, clear |
| Series 320-PHQ47     | Phosphorescent Ink, Security-Quality, green |
| Series 320-PHQ49     | Phosphorescent Ink, Security-Quality, blue  |
| Series 320-PHQ47/ECO | Phosphorescent Ink, Security-Quality, green |
| Series 320-PHQ49/ECO | Phosphorescent Ink, Security-Quality, blue  |



### SUBSTRATES

|                   |                  |                                |                       |
|-------------------|------------------|--------------------------------|-----------------------|
| Soft- / Rigid-PVC | Coated Polyester | Paper, paperboards, cardboards | Polystyrene, ABS, SAN |
| Polycarbonate     | Coatings         |                                |                       |



### USE

|                    |  |
|--------------------|--|
| <b>Application</b> | Graphical screen printing, advertising material, packaging's |
|                    | Functional coatings, escape security and emergency 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>    | Jet / air                            |
| <b>Further Processing</b> | Punching, cutting, embossing         |



### ADDITIVES

|                 |                |                       |                  |
|-----------------|----------------|-----------------------|------------------|
| <b>Thinner</b>  | Series 300-017 | <b>Addition Ratio</b> | 10-15% by weight |
| <b>Retarder</b> | Series 300-018 | <b>Addition Ratio</b> | 10-15% by weight |

### VARIOUS

|                            |  |
|----------------------------|--|
| <b>Delivery Conditions</b> | 1 kg / 5 kg / 25 kg  |
| <b>Other</b>               | Stir well before use; risk of sedimentation when long stored |

#### 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)