

PRODUCT GROUP 600

Series 640-PEQxx

Phosphorescent Inks, Economy Quality

Series 640-PHQxx

Phosphorescent Inks, Security Quality



The luminescent (after-glowing) inks of Series 640-PEQxx, respectively of Series 640 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 unique phosphorescent inks of Series 640-PEQ00 and Series 640-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 640-PEQxx, respectively Series 640 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 640 PEQxx and Series 640 PHQxx do not contain any radioactively or poisoning ingredients.

Following articles are available:

Series 640-PEQ00	Phosphorescent Ink, Economy Quality, white
Series 640-PEQ47	Phosphorescent Ink, Economy Quality, green
Series 640-PHQ05	Phosphorescent Ink, Security-Quality, colorless
Series 640-PHQ47	Phosphorescent Ink, Security-Quality, green
Series 640-PHQ49	Phosphorescent Ink, Security-Quality, blue
Series 640-PHQ47/ECO	Phosphorescent Ink, Security-Quality, green
Series 640-PHQ49/ECO	Phosphorescent Ink, Security-Quality, blue



SUBSTRATES

Soft- / Rigid-PVC	Coated Polyester	Metals [aluminum (raw, anodized, brushed)]	Alucobond, Dibond, Vekaplan VL
Coatings	Polystyrene, ABS, SAN	Polyolefin, coated or Primered	PMMA (pre-testing)



USE

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

Mesh	43-80 Y PW up to 77-55 Y PW PET 1000
Drying / Curing	Oven / Jet / Air
Further Processing	Punching, cutting, embossing



ADDITIVES

Thinner	Series 600-017	Addition Ratio	10 - 15% by weight
Retarder	Series 600-018	Addition Ratio	10 - 15 % by weight
Harder	Series 600-HDA	Addition Ratio	10 - 15 % by weight

VARIOUS

Delivery Conditions	1kg / 5kg / 25 kg
Other	Stir well before use (risk of separation)

Precautionary measures

Read material safety data sheet prior to processing. The material safety data sheets according to OSHA form contain indication of hazardous ingredients, TLV-level and instructions for precautions when processing, handling and storing as well as first aid. The information given in the MSDS refers to processing as described in this technical leaflet. The statements in our leaflets have been made to the best of our knowledge and are given without any obligation. They serve to advise our business associates, but it is absolutely necessary to make your own printing tests under local conditions, with regard to the intended purpose prior to starting the printing job. In case of any doubts please contact our technical advisors. The application, use and processing of the products delivered by us are beyond our control. This is subject to your responsibility and there is no liability or guarantee on our part. In case of justified complaints the manufacturer can only be made liable for the countervalue of the used ink system. Addition of not mentioned products or competitors products are on your own risk and releases Printcolor Screen Ltd. of any later demands, especially in cases of damage and loss caused by alien products. All former leaflets are no longer valid. (01/2009)