



## UV Gloss-PE Ink (UVHB)

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### PROPERTIES

UVHB is a UV curable, gloss inks suitable for printing pretreated Polyethylene (PE) and Polypropylene (PP) substrates. UVHB has excellent adhesion and fast curing speed. It has good flow and when completely cured, gives a smooth, gloss surface with good film strength, chemical, alcohol, and water resistance. UVHB has a mild odour and is environment-friendly.

### Direction of use

- 1) Stir well before use.
- 2) UVPB inks are supplied press-ready. However, if a lower viscosity is required, thin the inks with 5-10% UV ink Thinner (2001)
- 3) 4% UVHB073 additive is recommended if adhesion is a problem due to substrates. By adding such additive, chemical and water resistance will be enhanced.
- 4) UVHB Series is a fast curing ink. It will cure using a UV curing unit equipped with one 200 watts/inch medium pressure Mercury Vapor lamp.
- 5) A sharp U-shape polyurethane squeegee of 70-75 durometer hardness is recommended.
- 6) Mesh counts of 140 lines/cm or above is suggested.  
Tension should range from 16-20 N/cm<sup>2</sup> on metal frame. Higher tension is recommended for process colour printing.
- 7) UVHB can be printed through a variety of stencils, such as Diazol Plus Ultra (U016).

### Mileage

70-90 m<sup>2</sup>/Kg

### COLOUR RANGE

The UVHB range consists of 21 colours : 10 CMS (Chaiyaboon Matching System) Base Colours, 7 Standard Colours and 4 Trichromatic colours

### CMS Base Colours

The following CMS colours are suitable for direct printing or colour-matching:

UVHB327	UV Gloss-PE Ink	Light Yellow/CMS Yellow GS
UVHB347	UV Gloss-PE Ink	Mid Chrome/CMS Yellow RS
UVHB407	UV Gloss-PE Ink	Deep Orange/CMS Orange
UVHB507	UV Gloss-PE Ink	Vermilion/CMS Red YS
UVHB547	UV Gloss-PE Ink	CMS Deep Red
UVHB550	UV Gloss-PE Ink	CMS Red
UVHB560	UV Gloss-PE Ink	CMS Magenta
UVHB590	UV Gloss-PE Ink	CMS Violet
UVHB600	UV Gloss-PE Ink	CMS Blue
UVHB700	UV Gloss-PE Ink	CMS Green

### Standard Colours

The standard colours are available as follows:

UVHB100	UV Gloss-PE Ink	Black
UVHB200	UV Gloss-PE Ink	White
UVHB290	UV Gloss-PE Ink	Opaque White
UVHB330	UV Gloss-PE Ink	Light Chrome
UVHB623	UV Gloss-PE Ink	Mid Blue
UVHB624	UV Gloss-PE Ink	Royal Blue
UVHB625	UV Gloss-PE Ink	Ultramarine
UVHB090	UVHB Extender Base	Clear
UVHB073	UV Gloss-PE Ink Catalyst	Clear

### Trichromatic Colours

UVHB110	UV Gloss-PE Ink	Trichromatic Black
UVHB310	UV Gloss-PE Ink	Trichromatic Yellow
UVHB510	UV Gloss-PE Ink	Trichromatic Magenta
UVHB610	UV Gloss-PE Ink	Trichromatic Cyan

**Remarks:**

CMS	Chaiyaboon Matching Systems
RS	Red Shade
GS	Green Shade
YS	Yellow Shade

### Thinners and Cleaners

2001	UV Ink Thinner
2940	Cleaner

### STANDARD PACKING

UVHB inks are available in 1 Kg black PE can  
 The Solvents are available in 200 ltr, 20 ltr, 5 ltr and 1 ltr containers.

### Precautions

Avoid mixing solvent and thinner into UV ink as it will make the ink unusable. Avoid direct contact of ink with and clothing. If contact occurs, wash affected area with soap and warm water. Dry thoroughly ! Separate affected clothing from other clothes in the washing machine. If eye contact occurs, flush under running water for 15 minutes and consult a physician immediately. For further information, please refer to MSDS sheet.

### Test data

Substrate: Flame treated with surface tension of 72 dynes/cm)  
 Mesh Count : 180 lines /cm monofilament mesh  
 Stencil: Direct emulsion  
 Curing: condition 120 watts/cm medium pressure mercury lamp.  
 Intergral intensity : 500 mJ/cm<sup>2</sup>

Testing Item	Method	Results
Adhesion	Cross-hatch Tape Test	100/100
Over-printability	3 colors overlap test	Pass
Alcohol Resistance	Ethanol 99.5% soak for 24 hours	100/100
Water Resistance	24 hours soak test 40°C	100/100
Alkaline Resistance	25°C soap water, soak for 24 hours	100/100

**Remarks:** The above information is provided mainly for reference only. Variations in ink deposit, colour selection, curing power and substrate will affect the final results.

## COLOUR MATCHING SERVICE

CHAIYABOON BROTHERS COMPANY (CBC) offers a quality colour matching service. Colours can be matched to prints, wet ink samples or to PANTONE references. When placing an order, please include a sample of the substrate to be printed, along with any other relevant information, such as the type of mesh and squeegees that are to be used and the product resistance required. The minimum order for a colour match is 3 Kg.

## SAFETY AND HANDLING

- UVHB inks should be used with care. Wear suitable PPE, for example, appropriate gloves and safety glasses.
- All colours are non-toxic colours and comply with the following standards: EN71 Standard of the European Economic Community, the United Kingdom Toys (Safety) Regulation 1974, the DIN EN 71 Standard of Germany and French Toys Standard NF 551204, Title 16, Code of Federal Regulations of U.S.A.
- UVHB is amine and NVP(n-vinyl pyrrolidone)-free.
- UVHB does not have a flash point and is, therefore, exempt from the Highly Flammable Liquid Regulations.
- Whilst working with the ink, the consumption of food and drink, and smoking are not recommended.

Please consult the information on ***The Safety and Handling of UVHB inks*** in the Chaiyaboon Material Safety Data Sheet.

## ENVIRONMENTAL INFORMATION

### UVHB Inks:

- Are formulated free from ozone depleting chemicals as described in the Montreal Convention.
- Do not contain heavy metals.
- Are free from aromatic hydrocarbons, known to have an adverse effect on the environment.
- Do not have any volatile solvents and are therefore less harmful to the environment when compared with solvent-based products.

## TECHNICAL SERVICE AND INFORMATION

For further information or other relevant data, please do not hesitate to contact us. Chaiyaboon Brothers Company (CBC) has a team of well-trained personnel who are ready to give help and advise regarding product information and application.