



UNION INKS

Product Information

UVI-CD SCREEN INKS

72-00 SERIES

TIL NO: 803

APPLICATION AND PRINTING

UVI-CD 72-00 Series is single pack ultraviolet curable ink formulated to adhere over both Nitro cellulose and U.V. protection varnishes. It is a highly reactive gloss UV Screen Ink for use in high speed, off line and monoline, screen-printing of compact discs.

SCREENS

The cure characteristics and colour intensity of the Uvi-CD colours were developed using 150 - 34 threads / cm or 380 threads / inch mesh.

The use of more open mesh like 120 - 34 threads / cm can be used to improved the opacity of 72-00 series by increasing ink deposit, but care must be taken as this will reduce the cure efficiency and in extreme cases, this could affect the adhesion of the ink or leave an uncured layer of ink at the disc interface which can attack a Nitro Cellulose based varnish destroying the metallisation layer.

The use of finer mesh (165 threads / cm) deposit a lower ink build, this reduces the colour intensity and opacity. The 72-K100/1 Black and 72-W100/1 White opaque shades should be printed with 150-31 or 165-31 threads / cm or finer to ensure a complete cure.

THINNING

Uvi-CD ink is a pre-initiated, one part system, and ready to print from the container. If necessary, its viscosity can be reduced with UV Reducer 72-T102. Thinning ratio varies depending on printing conditions but do not exceed 5% by weight.

PRINTING

Prior to use ink must be thoroughly stirred and if necessary, thinned according to printing parameters. Printing should be off contact with well-sharpened polyurethane squeegee of average shore hardness of 70-75 shore. Soon after use clean the screen and other equipment with proper solvents.

CURING

Uvi-CD ink will cure on all commercially available UV CD printing lines. Cure speeds will depend on exposure time or line speed, wattage output, ink deposit and UV intensity. As a guide, printing using 140 threads/cm, UV energy required to cure the ink film is about 200-250 millijoules / cm⁻¹ on a UV-V spectral response.

SPECIAL PRECAUTIONS

The ink will show poor adhesion on certain U.V. protection varnishes, or if they have been over-cured or stored for a long periods before decoration. To prevent uncured ink attacking Nitro cellulose protection varnishes ensure that they are fully dried before overprinting.

PRODUCT RANGE

The standard basic shades are in the SSI screen ink colour guide.

- Trichromatic colours for process colour printing. (72-Y300 LD Yellow, 72-M300 LD Magenta, 72-B300 LD Blue and 72-K300 LD Black).
- 72-185 Extender medium to reduce unit cost of the ink.
- 72-187 Process medium to lower shade intensity without affecting ink original physical properties.
- 72-D100 Metallic medium
- Fluorescent Colours
- Metallic Finishes - supplied in two packs
- Pearlescent Finishes

The basic ink shades are:

CODE	COLOURS
72-P113	PRIMROSE YELLOW
72-Y114	GOLDEN YELLOW
72-S123	ORANGE
72-R100	RED
72-M100	MAGENTA
72-V100	VIOLET
72-B100	BLUE
72-G100	GREEN
72-K100	BLACK
72-W100	WHITE

COLOUR MATCHING

Union Inks offer a full in house colour matching service from 1 kilo.

PRECAUTIONS FOR USE AND STORAGE

Direct or prolonged ink exposure to light sources with UV contents should be avoided. Avoid contact with skins and eyes. If the ink comes in contact with the skin, promptly wash off with water and soap. If eye contact occurs, immediately wash off with water for 15 minutes and seek medical advice. Wash area has to be effectively ventilated.

Store product in a cool place and shelf life is about 6 months at 25 degrees C.

WARNING

This information is given in good faith, but without any guarantee as the printing conditions of our inks are beyond our control. In the event of complaints, the ink supplier may replace free of charge the unused ink, declining any other responsibilities.