



UNION INKS

Product Information

UNICURE SCREEN INKS

48-00 SERIES

TIL NO : 503

PROPERTIES

Glossy, two component ink with outstanding resistant to a wide variety of comestics, detergents, oils and other products packed in polyethylene or polypropylene containers..

- easiness of use both in catalysis and printing
- rapid drying giving high production yields
- good adhesion on Polyethylene with a treatment level of 46 - 48 (Union Carbide Surface Tension)
- easy printability with exceptional covering power and opacity
- excellent wheathering and lightfastness (blue wool scale 7 to 8)

APPLICATIONS

Unicure ink is a two pack curing system designed for screen printing onto treated polyethylene and polypropylene containers.

CATALYSIS

It is necessary to add proper catalyst **48-C191**. 1 part to 9 parts of Unicure ink. Catalysed ink must be employed within 24 hours depending on environment temperature, catalyst and thinner ratio.

For longer pot life, Catalyst **48-C192** is recommended. Mixing ratio is 95 parts of ink : 5 parts of 48-C192. Pot life of the mixed ink is about 72 hours in a tight closed containers.

SCREENS

Stencils must be solvent resistant. For fine details use 120 threads/cm fabrics, while 77 threads/cm fabrics are recommended for large areas or where higher opacity is demanded.

For screen wash-up, use Screenwash 99-SW113.

THINNING

- Fast Reducer: 48-T102
- Normal Reducer: 48-T104
- Slow Retarder: 48-T106

Thinning ratio varies depending on printing and drying conditions from 10 to 20% maximum.

PRINTING

Prior to use ink must be thoroughly stirred and 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 equipments with proper solvents.

DRYING

Drying or tack-free time at ambient conditions is acheived in 15 - 30 minutes while thorough curing is acheived in one week approximately. After this time prints will offer utmost chemical and mechanical resistance. Both drying and curing may be sped up using hot air dryers.

PRODUCT RANGE

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

- trichromatic colours for process colour printing.
- 48-185 Extender medium to reduce unit cost of the ink.
- 48-186 Gel medium to lower shade intensity without affecting ink original physical properties.
- 48-195 Transparent medium to modify the properties of pigmented ink or as an overprint varnish.
- 48-D100 Base medium for the preparation of metallic ink.
- 48-C191 Unicure Catalyst to be added at a level of 10% to the ink. Ink mixed with catalyst has a pot life of 24 hours.

The basic ink shades are :-

CODE	COLOURS
48-P100	Primrose Yellow
48-Y100	Golden Yellow
48-S100	Scarlet
48-R100	Red
48-M100	Magenta
48-V100	Violet
48-B100	Blue
48-G100	Green
48-K100	Black
48-W100	White

STOCK AND SURFACE TREATMENT

This ink is designed to give adhesion on to pretreated polyethylene. Untreated polyethylene has an inert surface which does not give ink adhesion. To render the surface ink receptive and to ensure good ink adhesion, it must be activated by flame treatment. It is recommended that printing is carried out as soon as possible after flaming.

It is emphasize that while chemical methods such as methylene blue/nitroethane may give an indication of whether or not a bottle has been treated, they do not necessary show whether the treatment is satisfactory. The most successful method of assessing treatment level is by the Union Carbide Wetting Tension Test. However, a variety of additives are included in the polymer and on some occasions, these may have a detrimental effect on ink adhesion. The only reliable test is to make a print and assess adhesion both immediately after printing and after storage.

It has been established that for a given ink, there is an optimum level of treatment that gives maximum adhesion and product resistance. Over flaming can results in print with good adhesion but little or no product resistance. This optimum level should be established to suit the printers particular conditions. The use of treatment level for all ink will not necessarily give the best results in all circumstances.

PRECAUTIONS FOR USE AND STORAGE

This material is not hazardous when used with a reasonable standard of hygiene and safe working practice. However, as with all chemicals, skin contact should be avoided and any contamination must be washed with plenty of water. In case of eye contamination, irrigate with plenty of water and seek medical advice. Store product in a cool place and shelf life is about 12 months at 25 degrees C .

WARNING

These information are 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.