



# UNION INKS

## Product Information

### *UNIPOXY SCREEN INKS*

### *54-00 SERIES*

TIL NO : 504

#### PROPERTIES

Glossy, epoxy based, two component curing system with outstanding chemical-physical characteristic. This ink offers :-

- very good adhesion to a wide variety of substrates.
- excellent covering power.
- good resistant to a wide range of solvents.
- outstanding mechanical properties: flexible, resistant to abrasion, shearing, drawing and bending.
- excellent dielectric power.
- good lightfastness ( 7-8 blue wool scale) for outdoor use.

#### APPLICATIONS

Two components epoxy ink of polyvalent nature for printing on a wide variety of materials such as:-

- aluminium and metal for the production of plates for domestic household and industrial appliances.
- plastic laminates and thermosetting ( melamine, urea, phenolic etc. ) resins.
- epoxy and phenolic plastic laminates for marking printed circuits.
- glass ( bottles, mirrors etc.)
- pretreated polyethylene and polypropylene (bottles and crates).

#### CATALYST

It is necessary to add proper catalyst 54-C191 to ink. Ratio varies according to performances required:-

- ink 3 parts to 1 part catalyst will result in film of maximum flexibility and gloss.
- ink 5 parts to 1 part catalyst is recommended for ink which will subject to moulding properties.
- ink 6 parts to 1 part catalyst give maximum film hardness and resistance properties.

For printing on glass, catalyst 54-C192 is used at a ratio of 1 part to 19 parts of ink. All catalysed ink must be employed within 8 hours depending on environment temperature, catalyst and thinner ratio.

#### 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 Universal Screenwash 99-SW113 or 54-T102.

#### THINNING

- Fast Reducer: 54-T102
- Normal Reducer: 54-T104
- Slow Retarder: 54-T106

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

## 54-00 SERIES cont'd 2

### 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 equipment with proper solvents.

### DRYING AND CURING

Drying or tack free time at ambient conditions is achieved in 45 minutes approximately at 25<sup>0</sup> C, 50% RH., while thorough curing is achieved in one week approximate. After this time prints will offer utmost chemical and mechanical resistance. Both drying and curing may speed up using hot-air dryers:-

- 60<sup>0</sup> C tack free time : 15 minutes  
curing : 2 to 3 days
- 120<sup>0</sup> C tack free time : 5 minutes  
curing : 25 minutes
- 150<sup>0</sup> C tack free time : 3 minutes  
curing : 15 minutes

### PRODUCT RANGE

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

- 54-195 transparent medium to modify the properties of pigmented ink or as an overprint varnish.
- 54-D100 Base medium for the preparation of metallic ink, fluorescent colours, pearlescent pigments and transparent dyes.
- 54-C191 Catalyst
- 54-C192 Catalyst

The basic ink shades are :-

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

### 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.