



### U.V. SCREEN N.F. serie

#### General description

U.V. SCREEN are solvent free single-package UV-curing screen printing inks which have been specifically formulated for printing on flame-treated or corona-pretreated polyethylene and polypropylene substrates. They can be used also for printing on PETG, PET, PVC and other plastic materials.

We always suggest to make tests on these last mentioned materials before starting mass production. Onto many PET it is possible to print with excellent results without any pre treatment.

#### Characteristics

- Very good printability, glossy finish, high opacity.
- High reactivity under the ultraviolet light.
- Excellent adhesion and inter-coat adhesion.
- Good chemical resistance to alcohol, detergents and oil.
- All colours do not contain heavy metals and correspond to EN 71 part III (safety of toys)
- **U.V. Screen inks do not contains NVP (N-vinyl-2-pyrrolidone)**

#### Application

U.V. SCREEN inks are recommended for use on polyethylene and polypropylene containers. These inks are especially suitable for high speed multi-colour screen printing machines fitted with inter-station curing capabilities.

A very good level of adhesion is possible on polypropylene containers only when the value of the surface tension is around 50 dynes/ cm after the flame treatment.

#### Fabrics and coverage

Curing speed, coverage and opacity depend from the choice of the mesh. Fabrics between 140 and 180 threads/cm are recommended.

#### Drying

U.V. SCREEN inks will cure at speeds of about 3000 - 5000 impressions per hour using a conventional 80 watt/cm UV lamp, with wave length 320-420 nm.

Higher print speeds are possible if curing units are equipped with higher wattage lamps.

The addition of 5-10% of Trasparente 236 will increase the cure speed but opacity will be reduced

After 24 hours the printed ink film will achieve. its maximum adhesion level , chemical and mechanical resistance as well as rub- resistance.



## SCREEN INKS

### COLOUR RANGE

U.V. SCREEN inks are supplied in the twelve standard shades.

Metallic shades can be obtained by mixing bronze powders or bronze pastes with Trasparente 236 FPT. The mixture should be processed quickly because some chemical reactions could reduce the life of ink.

### AUXILIARY PRODUCTS

DILUENTE REATTIVO 993	Thinner for reducing the print viscosity of white and transparent. Maximum addition of 5% is suggested
INDURITORE 3000	After the addition of 3 % of this hardener prints show considerably increased adhesion, hardness, mechanical and physical resistance. The mixture has a pot life of about 12 hours. The reaction is completed after 24 hours

### Packaging

All colours are available in 1 kg. and 5 kg. cans.

### Storage and shelf life

All UV inks should be stored in closed, black polyethylene containers, at temperatures between 15 ° and 25°C. U.V.SCREEN has a minimum shelf life of 12 months, but it can remain usable for longer period, depending on storage conditions.

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This information is based on our direct experience but it does not answer any real guarantee.