" U.V. PLAST"

General description

U.V.PLAST are solvent free UV-curing screen printing inks. After the UV polymerisation they show a glossy and tack-free surface with very good chemical and abrasion resistance.
U.V. PLAST has specially been developed for printing onto rigid and plasticised PVC. They are also suitable for pre-treated polyester, and in general for all thermoplastic materials like acrylics (polymethacrylates), polystyrene, ABS and polycarbonates.

Characteristics

- U.V.PLAST inks show a very good printability, a glossy finish and a high opacity.
- Very fast drying under UV light
- Good adhesion and inter-coat adhesion
- Good flexibility (cutting and punching is possible)
- These inks can be over embossed with hot embossing foils
- All colours don't contain heavy metals - correspond to EN 71 Part III (safety of toys).
- **UV PLAST don't contain NVP (N-vinyl-2-pyrrolidone)**

Application

These inks are largely employed for printing on self-adhesive materials (sheets and rolls) and plastic advertising signs for both indoor and outdoor application.
Due to their very good adhesion properties and high mechanical resistance "U.V. PLAST" inks are particularly suitable for printing on Membrane switches.
They are also used for the decoration of bottles and containers in PVC, PETG and some PET.

Fabrics and coverage

Curing speed, coverage and opacity depend from the choice of the mesh.
Fabrics between 140 and 180 threads/cm are recommended except for bronze shades where 120 threads/cm are suggested. The coverage is about 60/80sqm/kg, depending on fabric and ink shades,

Drying

The curing speed is 10-20 mt/minute under an 80-120 watt/cm lamp with wavelength 320-420 nm. This corresponds to an energy value of approx 300 mj/cm.
The curing speed depends on the following parameters:

- Power of UV dryer
- Ink thickness
- Colour shade.

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COLOUR RANGE

UV PLAST inks are supplied in the twelve standard shades of our matching system named "Colour System".
Thricromatic colours in Europe Scale are also available.
Metallic shades can be obtained by mixing bronze powders or bronze pastes with Transparent 236 CS FPT. The mixture should be processed quickly because some chemical reactions could reduce the life of the ink.

AUXILIARY PRODUCTS

DILUENTE REATTIVO 993	UV Plast inks are supplied at the right printing viscosity, however it is possible to reduce the viscosity by adding 3-5 % of this reactive thinner
DILUENTE AGGRESSIVO 789	The addition of about 3% of this thinner increases the adhesion on difficult plastic materials
UV. ACCELLERANTE 277	Very active product suitable to reduce the drying time mainly used for white colour. Addition suggested max 1%.
U.V. ACCELLERANTE 1347	Product used for all colours (except white) to increase the drying speed. Addition suggested 5%
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.

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 5 ° and 25°C.
UV PLAST has a minimum shelf life of 12 months, but it can remain usable for longer period, depending on storage conditions.

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