SCREEN INKS



"HIGH MAT U.V."

General description

HIGH MAT U.V. are solvent free uv-curing screen printing inks. After the uv polymerisation they show a matt and tack-free surface with very good chemical and abrasion resistance.

HIGH MAT U.V. have specially been developped for printing onto rigid and plasticised PVC. They are also suitable for pretreated polyester, and in general for all thermoplastic materials like acrylics (polymethacrylates), polystyrene, ABS and polycarbonates

Characteristics

- HIGH MAT U.V. inks show a very good printability, a matt 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 overstamped with hot stamp foils
- All colours do not contain heavy metals correspond to EN 71 Part III (safety of toys).
- **HIGH MAT U.V.** do not 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.

They are also used for the decoration of bottles and containers in PVC, PETG and PET.

Fabrics and coverage

Curing speed, coverage and opacity of the shade depend from the choice of the mesh.

Fabrics between 140 and 180 threads/cm are recommended except for bronze shades where 120 therads/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 a 80-120 watt/cm lamp with wave length 320-420 nm. This corresponds to an energy value of approx 300 mj/cm2.

The curing speed depends on the following parameters:

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



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Colours range

HIGH MAT U.V. inks are supplied in the twelve standard shades of our matching system named "Colour System".

Thricromatic colours in Europe Scale ara 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 HIGH MAT U.V. inks are supplied at the right printing

> viscosity, however it is possible to reduce the viscosity by adding 3-5 % of this reactive thinner but the matt level will

decrease proportionally

The addition of about 3% of this thinner increases the adhesion **DILUENTE AGGRESSIVO 789**

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 used Product 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 polyethilene containers, at temperatures between 15 $^{\circ}$ and 25°C.

HIGH MAT U.V. 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.