

Series

# UV BRAILLE

---

**Type:** UV (LED + traditional)

---

**Printing process:** screen printing

---

**Ink type:** one-component

---

**Finish:** glossy

---

**Materials:** ABS, Cardboard, Cellulose acetate, Coated paper, Lacquered surfaces, Paper, Polycarbonate, rigid PVC, SAN, Self-adhesive PVC, treated Polyester, treated Polypropylene, Wood

The BRAILLE UV series are transparent screen printing bases used to obtain thick effects on various substrates. The thickness is obtained with the appropriate preparation of the screen printing clichè, normally using photosensitive emulsions with dry on dry application, and screen printing fabrics from 100.40 to 43.48 threads.

---

**Main features:****BRAILLE UV 37, BRAILLE UV LED 37:**

transparent UV base for printing on Paper, Coated Paper, Cardboard.

Slightly opal to display any errors during printing. Suitable for flat printing.

. For correct printing of the Braille alphabet, we recommend preparing a screen printing clichet with a number of threads of 32.70 and a photosensitive emulsion thickness of 270-300 microns (application of the emulsion dry on dry)

- . good gloss (80-85 gloss, 60° angle)
- . excellent relaxation
- . low tendency to yellowing
- . fair flexibility (flexibility is inversely proportional to thickness).

**BRAILLE 365:**

transparent base for printing PVC, PC, ABS, paper.

- . excellent gloss (85-95 gloss, 60° angle)
- . good chemical fastness
- . fair elasticity
- . surface hardness (2H)
- . good photo-initiation speed (100-150mmj/cm)
- . poor yellowing.

**BRAILLE UV 445, BRAILLE UV 445 LED, BRAILLE UV 447:**

transparent base for printing PVC, PC, ABS, Polyester, SAN.

- . excellent gloss (80-85 gloss, 60° angle)
- . excellent relaxation
- . no post polymerization yellowing
- . good flexibility (flexibility is inversely proportional to thickness).

**BRAILLE 446 and 445 PP:**

transparent base for printing on ABS, Cellulose Acetate, Paper, Coated Paper, Wood, Polycarbonate, Polyester, PVC, Lacquered surfaces, treated Polypropylene.

The adhesion depends on the thickness to be obtained. For a higher thickness there will be less adhesion.

When printing on treated polypropylene film it is necessary to carry out preventive adhesion tests before production.

The same procedure also applies when the BRAILLE 446 series must be applied on offset printed substrates.

- . excellent gloss (85-95 gloss, 60° angle)
- . excellent relaxation
- . no post polymerization yellowing
- . good flexibility (flexibility is inversely proportional to thickness).

**BASE SERIG. LUCIDA UV:**

- . Excellent reactivity
- . Good flexibility
- . Excellent slipperiness
- . Gloss 90 angle 60 °
- . Viscosity 59-72 cps

Series

# UV BRAILLE

- . Flash point > 100 ° C
- . Solvent-free product with low residual odor
- . Not suitable for hot stamping.
- . Good resistance to chemical agents, especially alcohol
- . Good flexibility, resistance to cutting and creasing.

**Certifications:** CLP/GHS (EC 1272/2008), Conflict minerals free, EN 71-3, Reach (EC 1907/2006), RoHS

The EN 71:3 Directive is valid for standard shades of one component inks, two component inks, Ink system and Process colors, HD shades and for all not standard shades which do not contain metallic shades, metallic pastes or fluorescent pigments or inks.

In order to clarify any doubt on not standard shades, it is always recommended to provide us a specific request.

**Eco-sustainability** (free of): Alogens, Animal origin ingredients, Aromatic Hydrocarbons, Azo dyes, Bisphenol A (BPA), Cyclohexanone, Formaldehyde, G-B Ester, Latex, Melamine, PAH, Persistent organic pollutants, Phthalates (listed in RoHS directive), Volatile organic compounds

Note: inks are formulated without aromatics naphthas, potential IPA contaminations are minimal.

**Outdoor resistance** (years): 1

The BRAILLE series are not suitable for prints that must be exposed outside for long periods (3-5 years). To increase the outdoor solidity, we recommend adding UV ADSORBER to the ink, in the percentage of 2-5%.

**Drying process:** UV

The inks of the BRAILLE series curing immediately only with UV radiation (light-curing).

The total polymerization of the ink takes place largely within a wide range of energy emission. The polymerization also depends on the substrate on which it is printed, the thickness of deposited ink, the speed of the conveyor belt and the lamps used.

The wavelength (energy) required for photoinitiation ranges from 250-400 nm (ideal 365 nm) obtainable with a mercury pressure lamp from 80-200 W / cm. At a belt speed of 10 m / min.

The polymerization process using UV energy takes place not immediately, but progressively over time. 1-2 days are needed to complete the process.

**Mechanical and chemical solidity:**

Alcohol	
Flexibility (Elasticity or Bending)	
Surface hardness (Abrasion)	2H (braille uv 365)

The adhesion is in function of the thickness to be obtained. More thickness, less adhesion.

To obtain maximum adhesion it's important to consider the surface tension of the substrate, which must be higher than 38 N/m as the minimum limit. Ideal value: > 40 N/m.

**Colours range:** BRAILLE

365	37	445	445 LED	445 PP	446	447	BASE SERIG. LUCIDA UV		

Transparent

**Auxiliaries and additives:**

UV-DIL universal thinner	2,5%	5% max
--------------------------	------	--------

Series

# UV BRAILLE

UV 292 photoinitiator	2,5%	
UV 94 F photoinitiator	2,5%	5% max. for base serig. lucida uv
UV-CL adhesion promoter	2,5%	5% max
PP 1 adhesion promoter	6%	for braille UV 445 PP
UV 1 levelling agent	0,8%	for braille UV 365
UV 2 levelling agent	0,8%	
UV/N levelling agent	0,2%	for base serig. lucida uv
PLASTOL plasticizer	5%	max
Antistatic UV	1%	

**Ink removal:**

DACS solvent  
 Lavaggio telai solvent  
 Aprimaglia Spray

**STORAGE:**

Please keep the cans in a dark place, at temperature of 15-25°C.

If the recommended temperature is higher than the suggested one or the cans are not completely closed, the shelf life and the qualities are drastically reduced.

**CLASSIFICATION:**

Before using this ink, consult the relevant safety data sheets available.

The safety data sheets provided comply with the **REACH regulation (EC 1907/2006)**.

The hazard classification and related labelling are compliant with the **CLP / GHS regulation (EC 1272/2008)**.

**OTHER INFORMATION:**

For more information on SERICOM ITALIA srl products, refer to the website [www.sericom.it](http://www.sericom.it)

**NOTE:**

Our technical consultancy activity, carried out orally, in writing or through tests or experiments, takes place on the basis of our best knowledge.

However, the same must be considered as information without any binding value, also as regards any third party industrial property rights.

This does not exempt the customer from performing his own checks on the products supplied by us in order to estimate the suitability or otherwise of the procedures and for the purposes intended.

The application, use and transformation of the products take place outside our control possibilities and therefore fall under the exclusive responsibility of the customer.