

Series **1001**

Type: solvent

Printing process: pad printing

Ink type: two-component

Finish: glossy

Materials: Aluminium, Aminoplastic resins (hard-plast), Carbon, Epoxy resins, Glass, Iron, Lacquered surfaces, Metal (in general), Nylon 6.6, Phenolic resins (hard-plast), Polyamide, Polycarbonate, Polymethacrylate (PMMA), Polyurethane, Signage, Stainless steel, treated PETG, treated Polyacetal (POM) (hard-plast), treated Polyester

Main features:

- . Good coverage
- . Excellent brilliance
- . Good printability
- . Excellent solidity to acids, bases, greases, organic solvents and oils.
- . Excellent mechanical resistance
- . Ink for industrial applications where high solidity is required
- . Suitable for applications that need to be exposed to the outside

To be used only by adding the relative hardener at a specified ratio prior to processing.

Thinner is added after addition of hardener.

Leave the mixed ink pre-reacting for approx. 15 minutes prior to print.

The pot life of the ink is valid for a specified period of time, up to 8h/20°C.

Higher temperatures and humidity will reduce pot life (suggested temperature at 20-25°C and low moisture content in the workplace).

Because of the versatility of the use of this ink, and the possible differences in the quality of the used supports, pre-tests are suggested.

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, Azo dyes, Formaldehyde, G-B Ester, Latex, Melamine, PAH, Persistent organic pollutants, Phthalates (listed in RoHS directive)

Note: shades in the fluorescent color chart contain formaldehyde.

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

Outdoor resistance (years): 6

Suitable for outdoor application.

The used pigments have a solidity from 7 to 8 DIN.

In case of mixing with the transparent bases 70 TR or TP, or with the white 160 or 60 BN, the light fastness and atmospheric agents decrease.

If you want to increase the outdoor solidity, it's recommended to add 5-7% of UV adsorber to the ink.

Drying process: 20 minutes at room temperature

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1001 series dries physically by evaporation of solvents or through chemical reaction.

Drying times depend on various factors:

- . thickness of printed ink layer (single print, multi-layer print).
- . type and amount of thinners/retarders used.
- . type of oven
- . drying temperature
- . type of substrate on which the ink is deposited.

Ink dries physically by evaporation of solvents:

- . 10-15 minutes at room temperature (depending on local conditions)
 - . 30-40 sec at 50°C in an air circulation oven.
- (The test performed in our laboratory was carried out under the following conditions: 8 mt / min, clichet at 36 microns, medium thinner 1000 DM at 15%, air circulation oven).

Two-component drying by polymerization:

The polymerization (chemical reaction process) of the ink occurs about 15 minutes after the addition of the catalyst.

The polymerization times depend mainly on the temperature.

At a minimum temperature of 20°C, Series 1001 ends its cross-linking process in about 6-7 days.

An important increase of temperature accelerates the cross-linking process.

At a temperature of 140°C (film obtained with a 36 micron clichet, a dilution with a medium thinner of 1000 DM at 15%, 30 minutes inside oven) we obtain a film with a high degree of polymerization and with a maximum of solidity.

Mechanical and chemical solidity:

| | |
|-------------------------------------|-----------|
| Acids | excellent |
| Alcohol | excellent |
| Aliphatic organic solvents | excellent |
| Aromatic organic solvents | excellent |
| Bases | excellent |
| Brake oil | excellent |
| Diesel | excellent |
| Flexibility (Elasticity or Bending) | good |
| Gasoline | excellent |
| Surface hardness (Abrasion) | good |

The laboratory tests were carried out with a completely polymerised film (48 hours in a muffle at 80°C), using a pad printing clichet at 36 microns, medium thinner 1000 DM at 15%.

Or at room temperature (20°C) after 6-7 working days.

If necessary, help the adhesion of the ink modifying the surface tension of the various supports with specific treatments such as: plasma treatment, corona flaming (physical treatments), cleaning or degreasing (chemical treatments).

It's possible to do tests even with post physical treatments.

Colours range: EXTRA - M, INK SYSTEM, QUADRICROMIA

| | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110 | 111 | 112 | 115 | 117 | 120 | 121 | 122 | 124 | 130 |
| 131 | 132 | 133 | 134 | 136 | 140 | 141 | 142 | 150 | 151 |
| 160 | 165 | 10 GL | 11 GS | 12 AR | 21 RS | 22 RC | 25 MG | 27 VT | 32 BL |
| 40 VR | 60 BN | 65 NR | 70 TR | 1080 | 1081 | 1082 | 1083 | TP | |

Please refer to the Glossy, Metallic, Fluorescent and Ink System ink color charts.

The Ink System are 12 colour shades for mixing of RAL, PMS and HKS colours

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The metallic shades are available only by mixing the relative pastes with the Transparent Base 1001 70 TR.

Gold paste 75 10-20%

Gold paste 76 10-20%

Gold paste 77 10-20%

Bronze paste 78 10-20%

Silver paste 79-050 10-15%

The metallised pastes composed with the relative transparent base 1001 70 TR, due to their particular composition, can oxidize.

The pot-life of the compounded METALLIC PASTES is about 8 working hours.

Ink System shades are:

1080 yellow, 1081 magenta, 1082 blue, 1083 black, TP paste (CMYK), necessary for making four-color prints.

In the range are also included the following shades :

160 HD Opaque white

165 HD Opaque black

Auxiliaries and additives:

| | | |
|--------------------------------|------|--|
| 1000 DM medium thinner | 20% | |
| 1000 DL slow thinner | 20% | |
| 1000 DR fast thinner | 20% | |
| 1000H-N Green hardener | 17% | for outdoor applications. diisocyanate content < 0,1% |
| 1000H-N hardener | 33% | pot-life 6-8 hours |
| 1000H-N-00 hardener | 20% | |
| Retarder paste | 10% | max |
| M 2000/S conc. levelling agent | 0,5% | |
| Universal antifoam agent | 1% | |
| Antisilicone/s | 1,5% | |
| UV Adsorber | 8% | |
| NPT matting powder | 2% | 6% max |

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

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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.