

Series

1016

Type: solvent

Printing process: pad printing

Ink type: one and two-component

Finish: glossy

Materials: ABS, Lacquered surfaces, Leather, Polyamide, Polycarbonate, Polymethacrylate (PMMA), Polyurethane, rigid PVC, Self-adhesive PVC, Synthetic leather, treated Polyethylene (HD-PE, LD-PE), treated Polypropylene

Not suitable for prints on PS (Polystyrene)

Main features:

- . Semi-gloss
- . Good coverage
- . Good solidity to alcohol even used as a one component
- . Good solidity to different solvents if used as a two-component
- . Moderate solidity for prints that must be exposed outside
- . If used as a two-component the adhesion on treated PE and treated PP increases.

Because of the versatility of this ink, and the possible differences in the quality of the used supports, pre-tests are suggested. If necessary, help the adhesion of the ink modifying the surface tension of the various supports with specific treatments such as: plasma, corona, flaming (physical treatments), cleaning or degreasing (chemical treatments).

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

1016 series mixed with hardener has a pot life of approx. 8h (at 20°C).

Higher temperatures and humidity will reduce pot life

(suggested temperature at 20-25°C and low moisture content in the workplace).

Used as two-component ink, 1016 series has to be mixed with 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.

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): Animal origin ingredients, Azo dyes, Bisphenol A (BPA), Formaldehyde, G-B Ester, Latex, Melamine, Persistent organic pollutants, Phthalates (listed in RoHS directive)

Note: shades in the fluorescent color chart contain formaldehyde.

Note: all our inks are formulated with non carcinogenic aromatic naphthas as the benzene content is below than 0.1% by weight.

IPA contamination are also possibile but always below the limit of 1000 ppm.

Outdoor resistance (years): 2

Suitable for outdoor applications for periods not exceeding 3-4 years.

The used pigments have a solidity from 6 to 8 DIN.

1000H-N (10%) hardener is recommended for outdoor applications.

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

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agents decrease.

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

Fluorescent shades (refer to the FLUO color chart) are formulated with special pigments which, due to the molecular constitution, do not guarantee high light solidity and are easily decomposed by electromagnetic radiation. Outdoor exposure cannot be longer than two months.

Drying process: 15 minutes at room temperature

1016 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:

- . 15 minutes at room temperature (depending on local conditions)
- . 60 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:

When the Series 1016 is added with the relative hardener, at the beginning the ink dries physically, followed by the polymerization reaction which takes place at room temperature (20°C) in at least 5-7 days. If the printed film is heated in an oven at 80°C for about 20 minutes, the polymerization is completed within 48 hours.

Mechanical and chemical solidity:

Alcohol	even as a one-component
Cosmetics	as two-component
Detergents	as two-component
Gasoline	as two-component
Oils	as two-component

The tests must be carried out 5-6 days after printing.

Colours range: EXTRA - M, HD, 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	160 HD	165 HD	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 11 colour shades for mixing of RAL, PMS and HKS colours

The metallic shades are available only by mixing the relative pastes with the Transparent Base 1016 70 TR.

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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 1016 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
 165 S Non magnetic black

Auxiliaries and additives:

1000 DM medium thinner	20%	
1000 DL slow thinner	20%	
1000 DR fast thinner	20%	
1000H-N Green hardener	5%	for outdoor applications. diisocyanate content < 0,1%
1000H hardener	10%	
1000H-N hardener	10%	for outdoor applications
Retarder paste	10%	max
M 160 conc. levelling agent	0,5%	
Universal antifoam agent	1,5%	
Antisilicone/s	1,5%	
UV Adsorber	8%	
Antistatic/s	1,5%	
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**

NOTE:

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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.