

Series

VY-01

Type: solvent

Printing process: screen printing

Ink type: one and two-component

Finish: glossy

Materials: ABS, Aluminium, Aminoplastic resins (hard-plast), Cardboard, Lacquered surfaces, Leather, Paper, Phenolic resins (hard-plast), Polystyrene, rigid PVC, SAN, treated PETG, treated Polyacetal (POM) (hard-plast), treated Polyester, treated Polyethylene (HD-PE, LD-PE), treated Polypropylene, Wood

Main features:

- . Glossy
- . Good coverage
- . Moderate solidity for prints that must be exposed to the outside
- . Good chemistry solidity to alcohol, cosmetics, oils and greases if used as a two component
- . Soluble and excellent printability
- . If used as a two component the adhesion on treated PE and treated PP increases.

Because of the versatility of use of this ink, and the possible differences in the quality of the supports used, 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 treatment, corona, flaming (physical treatments), cleaning or degreasing (chemical treatments).

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

VY-01 series mixed with hardener has a pot life of approx. 8h (at 20°C).

Higher temperatures and humidity will reduce pot life

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

Used as 2-component ink, VY-01 series has to be mixed with hardener at a specified ratio prior to processing.

Thinner is added after addition of hardener.

The mixed ink should be allowed to pre-react 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.

XFH-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.

Drying process: 20 minutes at room temperature

VY-01 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:

- . 20 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, 120.34 screen printing mesh, medium thinner DILUENTE VINILICO at 15%, air circulation oven).

Two-component drying by polymerization:

When the Series VY-01 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	
Cosmetics	
Greases	
Oils	
Surface hardness (Abrasion)	

Moderate solidity for outdoor applications.

Good adhesion on surfaces with poor wettability (HD-PE, LD-PE and PP).

The addition of the relative hardener is necessary to increase fastness

Colours range: EXTRA - M, HD, INK SYSTEM, QUADRICROMIA

110	111	115	120	121	122	124	130	132	133
136	140	141	151	160	165	160 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 12 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 VY-01 70 TR.

Gold paste 75 10-20%

Gold paste 76 10-20%

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Gold paste	77	10-20%
Bronze paste	78	10-20%
Silver paste	79-050	10-15%

The metallic pastes composed with the relative transparent base VY-01 70 TR, due to their particular composition, can oxidize.

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

In the Ink System color chart are present the shades: 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

Auxiliaries and additives:

VINILICO medium thinner	15%	
VH slow thinner	15%	
XF-DR fast thinner	15%	
XFH-N Green hardener	5%	for outdoor applications. isocyanate content < 0,1%
XFH hardener	10%	
XFH-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%	
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

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.