

Series

HV

Type: solvent

Printing process: screen printing

Ink type: one and two-component

Finish: glossy

Materials: Nylon (without silicon), Synthetic fabrics, treated Polyester, Triacetate (Trevira)

(umbrellas, sports bags, fabrics)

Main features:

Glossy appearance
High thixotropy
Excellent printability
Good elasticity
Quick drying
High coverage even on absorbent substrates
Good solidity for outdoor exposure
Excellent adhesion on difficult substrates such as Nylon or Trevira.

If used as a two-component, XFH hardener increase the adhesion and chemical-physical solidity (washing, abrasion ...) to the printed film.

The "pot-life" of the ink, mixed with hardener, is between 6-8 working hours and depends on the environmental conditions (humidity, heat).

The percentage of XFH hardener to be mixed with the ink is 10%.

If a dilution is necessary to make the HV series ink printable, it is recommended to use the HV 175 thixotropic gel, which dilutes the ink maintaining a good thixotropy, excellent printability and less ink penetration into the fabrics. (Coverage).

To make the ink softer, we recommend the use of the plasticizer additive PLASTOL.

Because the versatility of use of this ink, and the possible differences in the quality of the supports used, 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): 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

HV ink is formulated with pigments which have a 6-8 DIN solidity. This solidity can be negatively influenced when colour blends with high percentage of white or transparent base 170 are formulated. Solidity not over 2 years.

Fluorescent shades (refer to the FLUO color chart) are formulated with special pigments which, due to the molecular

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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

HV 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:

- . 15-20 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, 43 screen printing mesh, air circulation oven).

Two-component drying by polymerization:

When the Series HV 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 15 minutes, the polymerization is completed within 36 hours.

Mechanical and chemical solidity:

Flexibility (Elasticity or Bending)	excellent
Surface hardness (Abrasion)	good
Washings	good

To increase elasticity, use the PLASTOL plasticizer. 5% max.

The addition of plasticizer can affect the resistance to abrasion and washing.

For dry cleaning we recommend to use XFH hardener.

Colours range: EXTRA - M, HD, VARIE

110	111	115	120	121	122	124	130	132	133
136	140	141	151	160	165	170	160 HD	GEL HV 175	

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

The metallic shades are available only by mixing the relative pastes with the Transparent Base HV 170.

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%

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The metallic pastes composed with the relative transparent base HV 170, due to their particular composition, can oxidize.

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

Auxiliaries and additives:

HV 175 medium thinner	10%	thixotropic gel
VINILICO medium thinner	10%	
XFH-N Green hardener	5%	for outdoor applications. diisocyanate content < 0,1%
XFH-N hardener	10%	
Retarder paste	10%	max
M 2000/S levelling agent	1,5%	
Universal antifoam agent	0,4%	
Antisilicone/s	1,5%	
PLASTOL plasticizer	5%	max
UV Adsorber	8%	
NPT matting powder	2%	6% max

HV GEL is used to dilute the ink and make it printable even without the aid of solvents and is used in a particular way, when very absorbent or very dark colored substrates must be printed, thus helping to maintain good coverage.

To be used in maximum 10-15%

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.