

Serie
Series

AUXILIARIES FOR SOLVENT PAD PRINTING INKS

During the printing phase it's possible that the ink used, due to the environmental working conditions or the material to be printed on (low surface tension, poor cleaning), may create issues in the printed film, such as: orange peel, bubbles, foam, pitting, poor elasticity, electrostatic charge, poor adhesion on difficult materials or similar effects.

In order to overcome these undesirable effects it is necessary to add appropriate additives normally called agents, levelling agent, antifoams, plasticizers, antistatic agents, etc.

These additives must be used with care in the percentages indicated and never in excess.

If the additives used contain silicones, the excess can cause problems of:

overprint
 veiling
 silicone surfacing
 opacification of the printed film
 bubble formation
 poor adhesion
 shrinkage of the printed film.

In all cases it is very important to mix the additive for a long time and vigorously, in order to obtain a perfect dispersion.

Levelling agent M 2000/S	Silicone with wide spectrum of applications. It is suitable for all types of ink except water-based ones. Eliminates problems of distension, orange peel, pitting, bubbles. Usage rate 1-2%.
Levelling agent M 2000 conc.	Basic silicone equal to M 2000/S. This additive is more concentrated and consequently more effective. It is used when the M 2000/S stretcher does not give satisfactory results. Percentage of use 0,3-0,5%.
Antistatic/S	Non-silicone product that is used to increase the conductivity of the ink, thus eliminating unwanted effects due to electrostatic charge. Percentage of use 1-3%.
Antistatic and retarder paste	Non-silicone paste product containing high-boiling solvents with the function of delaying the drying of the ink and consequently the undesirable effect of the electrostatic charge. Percentage of use 10-15%.
Additive UV Adsorber	Additive that, added to the ink, improves its resistance performance when exposed to the outside. The solidity of an ink depends on the resins and pigments used. If an ink is described in the various TDS as unsuitable for outdoor exposure, the improvement to be achieved is moderately good. Percentage of use 2-5%.
Antisilicone S	Leveling silicone used to preventing the formation of cissing. It improves the stretching and wetting of the substrate. Percentage of use 0,1-0,5%.
Antitack S	Silicone that is used when is necessary to make not-stick the surface of the printed ink. It is also used when the dirt accumulated on the printed film exposed outside must be easily removed. Percentage of use 0,1-0,5%.
Anti-floating additive	Mild silicone product. It reduces the surface tension between the pigments present inside the ink, controlling its flocculation and the floating effect. This effect is obtained when mixing multiple colors together but, especially, if the presence of the white color is high. During the drying of the ink film, some pigments with a lower specific gravity separate into small agglomerates and catch up on the surface and thus pitting or colored cells originate which abnormally stand out on the base color. Percentage of use 1-3%.

Serie
Series

AUXILIARIES FOR SOLVENT PAD PRINTING INKS

Plastol

Plasticizer used where a constant and long-lasting elasticity is required even also in critical climatic conditions. Its use, if correctly dosed, doesn't alter any characteristics of the ink used that contains it. Strict hot-cold cycles do not alter its characteristics. Recommended usage 3-5%.

Additive PP 1

The **PP1 Additive** was developed as an adhesion promoter for the overprinting of untreated polypropylene. Preliminary tests are necessary if other plastics and, in some cases, also metals (e.g. aluminum) are to be printed. The additive PP1 must be added to the ink in the proportions of 10-20%. Compatibility is limited to the ink series: **2000, 2000-PP.**

Additive PP 2

It has the same functions and applications as the PP1 Additive but more concentrated. Percentages of use 5-10%.

Primer PP

Primer PP is formulated (as adhesion promoter) for the pre-treatment of polypropylene not previously treated with the flaming or corona system. Preliminary tests are necessary if other plastics are to be printed and in some cases even metals (eg aluminum ...). The Primer PP can be applied by spray, by hand or by immersion. In any case, the applied thickness must be consistent, otherwise the PP Primer loses effectiveness. The layer of Primer PP can be overprinted one minute after application or even after a few months (maximum 2 months). If a solid pretreatment is required for outdoor applications, the Primer PP must be activated with the UV Adsorber Additive in the percentages of 2-3%.

Addensante S (Thickener)

Addensante S, in universal powder, is used to make screen printing inks more thixotropic when you need to print fine details, specific characters, half-shades or dither. Addensante S comes in the form of very fine powder and must be added to the ink in percentages of 1-2%. The dispersion of the Addensante S is very important and must be carried out with a mixer to avoid any agglomerations that could close the mesh of the screen printing fabric. Quantities greater than the recommended doses could take away brilliance from the inks.

Opacizzante in Polvere PT

Powder product to be used when you want to modify a glossy ink film into film with a matte, velvety and smooth finish. Percentage of use 2-3%. The addition of the Opacizzante in polvere PT increases the thixotropy of the ink and must be dispersed with a mixer to avoid any agglomerates that could close the mesh of the screen printing fabric. The powder is post-treated and is therefore recommended for opacifying inks that do not need to be overprinted. Excellent opacification at low concentrations. Less thixotropy.

Opacizzante in Polvere NPT

Powder product with the same characteristics and procedures of use of Opacizzante in polvere PT. To be used in the percentages of 3-6%. Untreated product suitable for overprinting. Excellent opacification at high concentrations. Greater thixotropy.

Wax PLT

Micronized wax that appear like inert fine powder with a high softening point. It improves surface slipperiness, scratch resistance, abrasion and gives a satin finish. Percentages of use 0,5-1%. Higher percentages reduce the gloss in the glossy inks and prevent overprinting.

Opacizzante in Pasta

The Opacizzante in pasta (**paste opacifier**) has the same characteristics as the Opacizzante in polvere NPT. The dispersion of the matting agent in powder, in a predefined mixture of solvents, allows to obtain a paste product easily dispersible in the ink even without the use of a mixer and without the increase of thixotropy. The level of opacity is always slightly lower than the result obtained by using powder opacifiers. To be used in percentages of 10-15%.

Serie
Series

AUXILIARIES FOR SOLVENT PAD PRINTING INKS

Higher percentages could dilute the ink too much.
Untreated product suitable for overprinting.

Adhesion promoter MV

Promotes the adhesion of the inks that polymerize through free radicals on inorganic substances such as glass, metal and some types of plastics. Suitable for the inks of the **1002, 1005, 1016, 3000, 3002** series. Percentage suggested 1-5%.

Antioxidant

Product used to stabilize inks from oxidation which could cause chalking, discoloration and bleaching problems. Universal product to be used in the percentages of 0.5-2%.

NOTE:

Our technical consultancy, carried out by word, by writing or through tests and experiments, is based on our best knowledge.

Said consultancy, however, must be considered as pure information with no binding value, even when regarding eventual property rights of third parties.

This does not exempt the customer from carrying out his own controls on our products, in order to check their suitability or not for the processes and purposes required.

The application, the use and the transformation of our products take place out of our control, therefore the customer has the whole responsibility.