Solutions for digital inks and primers

Our commitment is to promote the sustainable chemistry, without loss of technical performance. Waterborne solutions are the choice. The inkjet printing technology is highly sensitive and demanding, and, at Lamberti, we endeavour to develop new inkjet ingredients, which increase the formulation latitude and contribute to close the gap of performance with the conventional application methods.

Digital binders

Our ESAJET digital binders, for waterborne inkjet inks, are designed to confer fastness on a wide range of substrates, including textile and plastic films, and to have a low impact on the environment. The ESAJET range of digital binders are based on polyurethane and acrylic dispersions, and are able to deliver high application performances, while remaining safe for the inkjet printing heads, thanks to good ink re-solubility and ease of filtration on the mostly used inkjet-types of filters. Our binders also offer printing reliability in ink formulation, through a compatibility with a wide range of glycols and the most popular commercial pigment dispersions.

Hyper-dispersants

The FLUIJET® hyper-dispersants guarantee stability for very fine dispersions of pigments and dyes, while delivering great colour vividness. The FLUIJET® range of hyper-dispersing agents are high molecular weight copolymers, which merge the surfactant properties of oleo chemical derivatives with the acrylic polymers' capabilities, making them able to disperse and stabilize organic pigments and disperse dyes for inkjet applications.

Primers

Dedicated ranges of primers (LAMBERTI JET, ESACOTE®) handle the droplets of water-based inkjet inks to obtain the best print definition on the desired substrates without compromising the fastness properties of the final products.

Complementary range

Thickeners and wetting agents are complementing the range of key ingredients for the formulation of premium inkjet inks.

Our technical solutions are all developed in compliance with the most stringent and ever-evolving regulations.

Esajet "Digital" Polyurethane Binders for Waterborne Inkjet Inks

Product	Chemical Nature	Solid content	Recommended applications	Description
200	PU	30%	Textile	Unique textile binder designed for inkjet; entirely safe solution for the printheads. Roll-to-roll printing.
882	PU	32,5	Textile	New version of Esajet 200 with enhanced fastness. Roll-to-roll printing.
4518	PU	35%	Flexible films, Paper & LVT	Binder for printing onto plastics intended to be laminated, either with glue (e.g. PP, PET) or heat (e.g. PVC).
D8	PU/PAC	35%	Flexible Films & Textile	Universal PU binder with good re-solubility Recommended for CMYK and white textile inks
D11	PU	40%	Textile	Textile binder with good re-solubility Ideal to blend with ESAJET D 8 inside a white ink.
D9	PU	35%	Textile	Textile binder designed for white and CMYK inks in DTF and DTG printing applications.
D10	PU	32%	Textile	Textile binder for white ink in DTF and DTG printing applications. More elastic than Esajet D9.
D12	PU	35%	Textile	New binder for white ink in DTG and DTF printing applications. Improved elastic properties and opacity. Low viscosity.
18/N	PU	40%	Textile	Crosslinker for digital pigmented inks.
PU 13	PU/PAC	35%	Advertising & Textile	Hard binder for surface printing. Fair adhesion strength to plastics
PU 77	PU	35%	Flexbile Films	Hard binder for surface printing. Heat resistant.

Readily biodegradable according to OECD 301B test

Esajet "Digital" Acrylic Binders for Waterborne Inkjet Inks

Product	Chemical Nature	Solid content	Recommended applications	Description
AC 20	PAC	40%	Flexible Films & Advertising	Self-crosslinkable acrylic binder (Tg = 25°C)
AC 22	PAC	43%	Flexible Films & Advertising	Self-crosslinkable acrylic binder with higher Tg (=50°C)
AC 29	PAC	46%	Textile	Conventional acrylic binder. Soft touch for textile (Tg = -10°C)
AC 31	PAC	40%	Advertising	Hard acrylic binder with high resolubility (Tg » 65°C)
AC 03	PAC	40%	Flexible Films & Advertising	Conventional acrylic binder (Tg = 29°C)

Fluijet® Hyper-dispersants for Pigments and Dyes

Product	Chemical	Solid content	Other info
1725	Synthetic polymer	40%	Universal dispersant for organic and inorganic pigments as well as disperse dyes for sublimation applications.
1726	Acrylic copolymer	32%	Dispersant specific to disperse dyes.
1730	Synthetic polymer	50%	Universal dispersant for pigments. Particularly compatible with ESAJET 200.
1731	Synthetic polymer	50%	Low VOC version of Fluijet 1730.
1735	Synthetic polymer	45%	New version of Fluijet® 1730 with higher color strength and low VOC.
DS 19	Anionic and non-ionic surfactants	45%	Dispersant for pigments. Very low viscosity and good performance with PV 23
1768	Aqueous solution of acrylic polymer	50%	Dispersing and stabilizing agent for titanium dioxide pigment
1761	Dispersion of acrylic polymer in water	40%	Dispersing and stabilizing agent for titanium dioxide pigment

LAMBERTI JET Pre-treatments for Digital TEXTILE Printing with Waterborne Inks

Product	Ionicity	Type of Inks	Other info
Lamberti Jet P70	Cationic	Pigment	Synergic blend of chemicals designed for pre-treatment of fabrics to be printed by inkjet with water-based pigment inks.
Lamberti Jet S	Cationic	Subli Dyes	Blend of chemicals for the preparation of polyester fabrics to be directly digitally printed with sublimation inks
Lamberti Jet A5M	Non-ionic	All	Post-treatment for textiles printed with digital inks to confer high fastness properties without compromising hand feel of the fabrics.
Esajet 18	Non-ionic	All	Crosslinker to be used in mixture with various Lamberti Jet pre-treatments to increase rubbing and washing fastness of the fabrics

LAMBERTI JET Pre-treatment for Digital PAPER Printing with Waterborne Inks

Product	Ionicity	Type of Inks	Other info
Lamberti Jet Décor D2	Cationic	Pigment	Blend of chemicals specifically designed for the preparation of decor paper to be printed by inkjet with aqueous pigmented inks.

Esacote® Digital Binders for Primers - Non Porous Substrates

Product	Description
ESACOTE® PU C1	Cationic waterborne PU dispersion, showing good compatibility with main additives/booster used to improve print quality of waterborne digital inks. Low hygroscopicity
ESACOTE® NBD	Non-ionic waterborne PU dispersion, good compatibility with main additives/boosters to improve print quality of waterborne digital inks. More hygroscopic than PU C1
ESACOTE® PU 4045	Anionic waterborne PU dispersion, very good compatibility with main additives/boosters to improve print quality of waterborne digital inks. Low hygroscopicity, neutral.
ESACOTE® PU 3010	PU-PAC waterborne PU dispersion, specially modified in order to enhance print quality of waterborne digital inks. Good adhesion on BOPET/BOPP films.
ESACOTE® PU 2001	Cationic waterborne PU dispersion, specially modified in order to enhance print quality of waterborne digital inks. Very low hygroscopicity – good adhesion on BOPET/BOPP films.
ESACOTE® AC 110	Hydroxylated acrylic emulsion with good compatibility with main additives/boosters to improve print quality of waterborne digital inks. Very good anti-blocking resistance.
ESACOTE® AC 200	Self-crosslinking acrylic emulsion with good compatibility with main additives/boosters to improve print quality of waterborne digital inks. Enhanced adhesion on plastic substrates.

ADDITIVES

Product	Chemical	Solid Content	Other info
Thijet 170	HEUR	46.5%	Solvent free and VOC/SVOC free, thickener for water-based inkjet inks, especially pigment based.
Bamax 104-PG	Surfactant	50%	Wetting agents for organic and inorganic pigment dispersions.

Based on vegetable sources