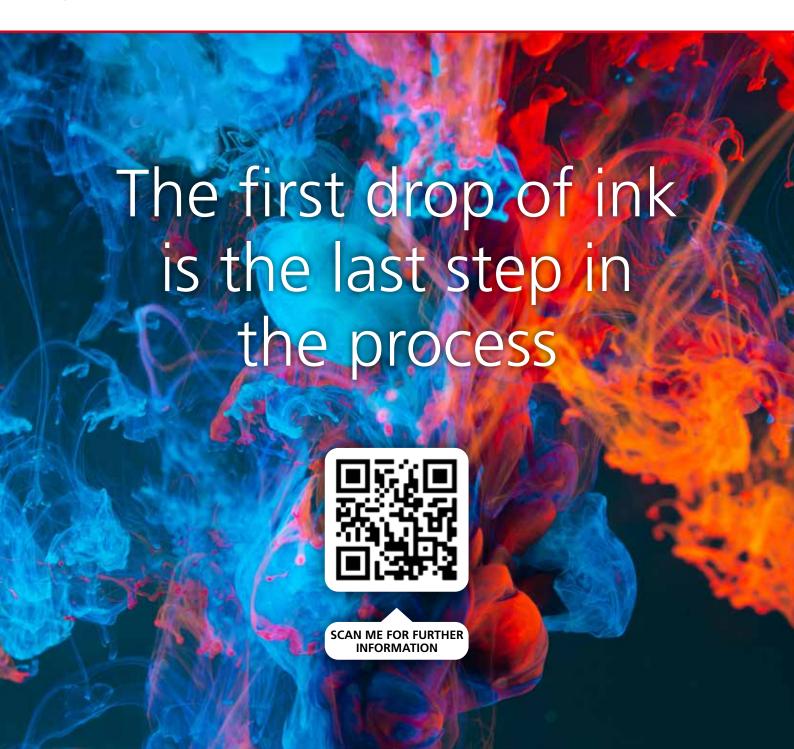


DIGITAL PRINTING FOR LABELS AND PACKAGING

Siegwerk's solutions for inkjet





Siegwerk going digital

Getting ready for the future of printing

You know us. Every day you encounter Siegwerk printing inks in supermarkets and department stores, at newsstands and in gas stations. In fact, everywhere you see printed products such as yogurt containers, drink bottles, packaged soup, glossy magazines and cigarette packs appealing to consumers.

With around 5,000 employees worldwide, Siegwerk is the market leader for high-quality printing inks for a wide variety of packaging and publications. Our value proposition includes competitive products, reliable solutions and individual service which often goes well beyond the printing ink itself.

We all live in a fast-paced, ever-changing environment. Consumers have the choice between thousands of products so brand owners must differentiate their products for different

customer tastes across different market segments. As a result, Siegwerk now offers inks for digital packaging printing applications requiring short print runs and even shorter lead times.

Short print runs enable brand owners to adjust and customize print designs to easily make their brands stand out from competitors through regionalization and personalization of their product packaging.

Shorter lead times allow printers to react quickly to changing market tastes and customer requirements. And from an environmental standpoint, digital printing supports sustainable printing processes by offering printers a reduction of waste and ink stocks.



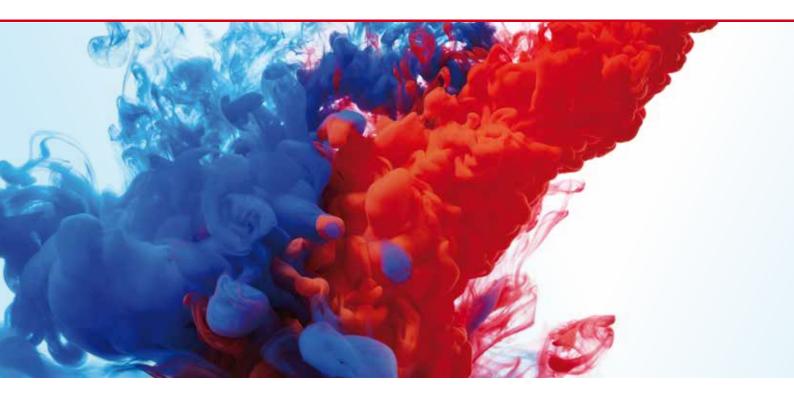
UV inkjet for labels and direct-to-pack

Customized products for versatile applications

UV inkjet is fit for success in printing of:

- Self-adhesive labels
- Wet-glue labels for food / beverages
- Direct printing on 3D-packaging objects
- Blister Packaging
- Aluminum lids
- and many more ...

Siegwerk offers ink families for different print systems.



Aqueous inkjet inks for packaging

Water based inkjet inks for absorbing and non-absorbing substrates

WB inkjet inks are suitable for:

- Flexible Packaging
- Corrugated
- Folding Carton
- Tissue and Napkins
- Paper cups
- and many more...

Siegwerk develops project based solutions with strategic partners.

SICURA Jet and SICURA NutriJet

Siegwerk's offering in UV Inkjet Inks for labels and direct-to-object printing

INK FAMILIES FOR LOW-VISCOSITY INKJET PRINT HEADS including Kyocera, Fuji Samba, Epson or Ricoh (MH5220)

Ink series	Colors	White	Hexachromie	Spot Colors	Viscosity at 40°C	Description
SICURA Jet G2	•••••	\bigcirc^1 \bigcirc^2	••••	upon request	5,8-7,2	General purpose process set for Labels & Packaging applications on non-absorbent substrates (1 Regular opacity, 2 High opacity)
SICURA Jet G4	••••	\bigcirc^1 \bigcirc^2	•••	upon request	6,5-8,5	Highly flexible ink series especially designed for laminate tube printing and other flexible application (1 Pre-print white ink, 2 Post-print white ink)
SICURA NutriJet GLM	••••	0	-	upon request	5,5-7,5	Low-migration ink set for low-viscosity print heads
SICURA Jet D2K	•	_	-	_	6,0-7,0	Deep black ink for coding applications

COMPLEMENTARY PRODUCTS FOR LOW-VISCOSITY INKJET PRINT HEADS including Kyocera, Fuji Samba, Epson or Ricoh (MH5220)

Ink series	Colors	White	Hexachromie	Spot Colors	Viscosity at 40°C	Description
SICURA Jet G2 Varnish	_	-	-	-	6,0-7,0	Standard varnish for protection and visual accents on prints
SICURA Jet G2 Primer	_	-	-	-	6,0-7,0	Standard primer to improve adhesion and laydown of the ink

Siegwerk UV inkjet inks are designed for single pass piezo drop-on-demand printers with outstanding reliability.

SICURA Jet are low oder inks for labels industrial and household packaging.

SICURA NutriJet is particularly designed for the use in sensitive applications as e.g. food or pharma packaging.

Further information on the various UV ink series can be found in our technical data sheets which we provide upon request.

INK FAMILIES FOR REGULAR-VISCOSITY INKJET PRINT HEADS including Konica Minolta, Xaar, Seiko or Ricoh

Ink series	Colors	White	Hexachromie	Spot Colors	Viscosity at 45°C	Description
SICURA Jet Design DP2	••••	_	•••	upon request	9,0-13,0	General purpose ink set for Labels & Direct-to-Packaging printing
SICURA Jet Pack SUV2	•••	_	_	upon request	9,0-13,0	Designed for printing on paper-based substrates
SICURA Jet White	_	○ ₀₀₄ ○ ₀₀₅	_	_	11,0-14,0	High opacity whites for surface printing (004) and pre-printing (005)
SICURA NutriJet LMX	•••	0	••	upon request	9,0-13,0	Low-Migration ink set for regular viscosity print heads

COMPLEMENTARY PRODUCTS FOR REGULAR-VISCOSITY INKJET PRINT HEADS including Konica Minolta, Xaar, Seiko, Epson or Ricoh

Ink series	Colors	White	Hexachromie	Spot Colors	Viscosity at 45°C	Description
SICURA Jet DP2 Varnishes	_	-	-	-	9,0-12,0	Standard varnish available as hard (higher scratch resistance) and soft (higher flexibility) version
SICURA Jet DP2 Primer		-	-	-	8,2-10,2	Standard primer to improve adhesion and laydown of the ink
SICURA NutriJet LMX Varnish	-	-	-	-	11,0-13,0	Low-Migration varnish for protection and visual accents on prints
SICURA NutriJet LMX Primer	-	-	-	-	11,0-13,0	Low-Migration primer to improve adhesion and laydown of the ink
SICURA Jet Matt Varnish	-	-	-	-	8,0-12,0	Decorative varnish giving a matt appearance to the final application

Unijet FP, Unijet COR and Unijet TN

Siegwerk's offering in pigmented WB Inkjet Inks

WATER BASED INKJET INKS FOR LOW-MEDIUM VISCOSITY PRINTING HEADS*

Ink series	Colors	Viscosity (30°C, mPa*s)	рН	Description
Unijet FP	•••••	4,0 - 5,0	7,5 - 9,0	General purpose inkjet ink set for non-absorbing substrates, as e.g. PA, PET, PE, PP, BOPP or PVC
Unijet COR	••••	5,0 - 6,5	8,5 - 9,5	General purpose inkjet ink set designed for diverse types of paper & board
Unijet TN	•••	5,0 - 6,5	8,5 - 9,5	Inkjet ink set designed for absorbing substrates, as e.g tissue, napkins or paper towels
Unijet Flush	-	-	7,0	Flush and cleaning media for Unijet inks

All Unijet inks are suitable for applications with high product safety and regulations (PS&R) demands, such indirect food packaging, pharma or hygiene packaging.

The ink series can be customized and adapted to end-user applications.



WATER BASED INKJET INKS FOR MEDIUM-HIGH VISCOSITY PRINTING HEADS**

Ink series	Colors	Viscosity (30°C, mPa*s)	рН	Description
Unijet TN-HV	•••	8,0 - 9,0	8,0 - 9,0	Same as Unijet TN, but adjusted for medium viscosity jetting
Unijet COR-HV	••••	9,0 - 12,0	9,0	Same as Unijet COR, but adjusted for medium-high viscosity jetting

APPLICATION EXAMPLES



Paper based bar wrapper



Sack bag



Candy bags



Folding carton



Catalogues



Hygiene packaging



Tissue



Paper cups

^{**}e.g. Fuji Starfire SG600/1024, Konika Minolta KM1024i/KM1800i, Seiko 508GS, Ricoh Gen6.



WB primer for board and folding carton

Siegwerk's offering in auxiliary products for inkjet printing

PRODUCT RANGE MATT	Food	Substrate	Viscosity (s) DIN4	рН	Gloss	
WB UNICOAT UCB 15-618637-1	Yes	Uncoated board	18 - 25	6,0 - 6,5	••	
WB UNICOAT CB 15-618607-4	Yes	Coated board	18 - 25	6,0 - 6,5	••	
PRODUCT RANGE TRANSPARENT	Food	Substrate	Viscosity (s) DIN4	рН	Gloss	
WB UNICOAT T2 15-617094-6	Yes	Film / board / tissue	15 - 20	6,0 - 6,5	••••	
WB UNICOAT DIGITAL PRIMER 15-617091-2	Yes	Film / board	20 - 30	11,0 - 11,5	••••	



WB INK JET PERFORMANCES

•	••••	••••
•	••••	••••
nctionality rintability)	Water absorption	Print resistances
•	••	••••
•	••	••••

Depending on print conditions and applications, Siegwerk can advise on suitable WB primers and overprint varnishes (OPV).

Our WB UNICOAT and UNILAC products, all designed for flexo printing, open new windows for Ink Jet printing with our WB UNIJET ink series.

All products can be customized to end-user applications.



WB primer for tissue & WB OPV for board

Siegwerk's offering in auxiliary products for inkjet printing

PRIMER FOR TISSUE	Food	Substrate	Viscosity (s) DIN4	рН	Non corrosive properties
TP2.COLOR TISSUE PRIMER DIGITAL 15-619704-8	Yes	Tissue	14 - 20	6,5 - 7,5	••••

OPV	Food	Substrate	Viscosity (s) DIN4	рН	Gloss (60°)
WB UNILAC Coating 15-618631-4	Yes	Coated board	15 - 25	7,2 - 8,0	25
WB UNILAC Mat Coating 15-617094-6	Yes	Coated board	18 - 25	6,8 - 7,4	9



WB INK JET PERFORMANCES

Functionality (Printability)	Water absorption
••••	••

PACKAGING PROPERTIES

COF (°)	Rub	Glue able
24	•••	•••
29	••••	•••

All our products comply with the Regulation (EC) No 1935/2004, the Swiss Ordinance 817.023.21 and the Turkish Food Codex Regulation (No. 30381).

Primer and OPVs are produced according to GMP standards.

Overprint varnish/primer solutions for UV-inkjet

Flexographic printing product range

WB OPV	Gloss	Food compliance (indirect contact)	Hot foil stampability	Over-printability (with UV Inkjet)	Substrate
TP WB UNILAC Coating 15-618639-7	•••	Yes	No	No	Paper / Coated & Uncoated board
WB UNILAC MAT Coating 15-618609-0	•	Yes	No	No	Paper/Coated & Uncoated board
WB Primer	Gloss	Food compliance (indirect contact)	Hot foil stampability	Over-printability (with UV Inkjet)	Substrate
WB UNICOAT CB (for post-print- COATED BOARD) 15-618607-4	•	Yes	No	••••	Paper / Coated & Uncoated board
WB UNICOAT UCB (for post-print- UNCOATED BOARD) 15-618638-9	•	Yes	No	••••	Paper/Coated & Uncoated board
WB UNICOAT TP1 (for pre-print) 17-618574-2	•	Yes	No	••••	Paper/Coated & Uncoated board
WB Unicoat T3 15-617091-2	•••	Yes	No	••••	Films
UV OPV	Gloss	Food compliance (indirect contact)	Hot foil stampability	Over-printability (with UV Inkjet)	Substrate
Sicura Flex OPV 85-600533-5.2360	••••	No	No	No	Self-adhesive films
Nutriflex Gloss varnish SC E01 85-601344-6.2360	••••	Yes	No	No	Self-adhesive films
UV Primer	Gloss	Food compliance (indirect contact)	Hot foil stampability	Over-printability (with UV Inkjet)	Substrate
Flex Primer varnish 85-601778-5	•••	No	Yes	••••	Self-adhesive films
UV LED	Gloss	Food compliance (indirect contact)	Hot foil stampability	Over-printability (with UV Inkjet)	Substrate
Nutriflex LEDTec Gloss varnish 85-601013-7	••••	Yes	Yes	••••	Labels, Food packaging, pharma, etc.
Nutriflex LEDTec Matt varnish 85-601249-7	•	Yes	Yes	••••	Labels, Food packaging, pharma, etc.
LM UV Primer	Gloss	Food compliance (indirect contact)	Hot foil stampability	Over-printability (with UV Inkjet)	Substrate
Nutriflex 2K Primer Non Yellowing 85-600271-2	••	Yes	Yes	••••	Self-adhesive films
Nutriflex Primer varnish E46 85-600675-4	••	Yes	Yes	••••	Self-adhesive films
Nutriflex Primer Varnish E02 85-600736-4	••••	Yes	Yes	••••	Self-adhesive films





SCAN ME FOR FURTHER INFORMATION

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