

UniNATURE – RethINK SOLUTION

for Paper & Board Applications





Ready for circularity?

Creating circularity is key to sustainably shape the future of packaging. It is time to take responsibility and jointly drive the transformation from a linear towards a circular packaging economy model based on the reduction, reuse and recycling of packaging. Reducing waste by design, keeping products and materials in use and regenerating natural systems are fundamental principles of circular solutions.

To further build on the potential of Paper & Board regarding circularity, inks and coatings play an essential enabling role to extend their usage to further application segments replacing less sustainable solutions going forward.

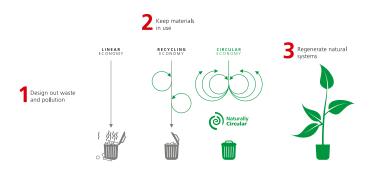
Join us to rethINK packaging and further shape the future of packaging for a circular world.

The path to UniNATURE

As one of the world's leading ink manufacturers Siegwerk is committed to the principle of sustainability: achieving a sensible balance between ecological, social and economic needs without compromising the resources of future generations.

Sustainability means progress to Siegwerk. For years, Siegwerk's Paper & Board team has been working on further extending the

Paper & Board already belong to the more sustainable packaging materials as they are based on renewable resources only.



company's portfolio of sustainable product solutions to concretely support the renewability and further enhance the recyclability of Paper & Board packaging.

With UniNATURE we offer the next generation of sustainable water-based inks, and coatings for Paper & Board applications meeting the requirements of brand owners and packaging converters.





UniNATURE – The best for your products

UniNATURE products are formulated with a high Bio Renewable Content (BRC). They are extenders and technical coatings intended for use with UNIBASE and Uni T products.

UNIBASE and UNI-T are highly monopigmented concentrates with a low VOC content. UNI-T being especially developed for products demanding food contact applications where compliance with BFR (Federal institute of risk assessment) opinion 021/2014 regarding PAA's (primary aromatic amines) is required for example for napkins and bakery bags.

The UniNATURE series is suitable for many Paper & Board applications including corrugated board boxes, trays and displays, fast food packaging, sacks and bags, as well as cups and wraps. It supports various printing applications whilst meeting the highest market and regulatory standards.



Benefits at a glance

Same but different:

Printed with Siegwerk standard extenders & technical coatings	Printed with UniNATURE
Excellent ink performance	✓ Excellent ink performance
/ Very good color strengths	✓ Very good color strengths
/ High printing-speed for efficient print runs on coated and uncoated papers	 High printing-speed for efficient print runs on coated and uncoated papers
/ Easy cleaning & high resolubility	Easy cleaning & high resolubility
/ High print-resistance	\checkmark High print-resistance
-	\checkmark Lower carbon footprint
-	\checkmark Lowering the proportion of petrochemicals
-	Lowering the proportion of microplactics by increased share of renewable content
	Submitted for OK compost certificate

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Case Study: UniNATURE in practice

We work with our customers to develop custom ink portfolios to match all requirements. Our experts provide ink formulations, which have exactly the right properties and the functionality you need for your applications.



Customer's goal

To find a sustainable alternative to current solution used to print corrugated trays



Customer's requirements

New extender should have a renewable carbon content of up to 40 %

New extender should fulfil the same criteria as the one used so far such as:

- $\cdot\,$ easy handling and easy maintenance on press
- right balance between resolubility, drying & drying speed
- good transfer
- · good printing quality
- good rub resistance





Customer's setting Basic data:

- corrugated tray
- · coated paper/white
- 1 color

Machine:

- · Bobst Flexo 160-Vision + Bobst Epertcut 1.6 Inline
- · Speed: 6000 sheets/h
- Hot Air Dryers



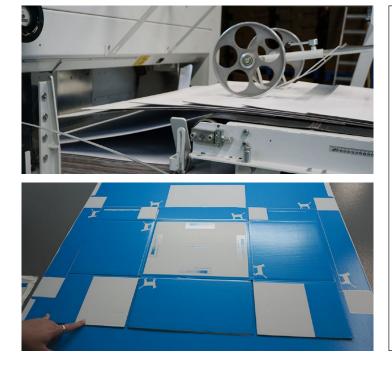
Siegwerk solution

15-019528-7 UniNATURE POSTPRINT T VERSCHNITT



Additional advantages

✓ Easy to exchange with current product, no need to change equipment or processes





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INK, HEART & SOUL

Production of water-based printing inks for Paper & Board applications





High performance printing inks for Paper & Board

Siegwerk is an international, market-leading manufacturer of printing inks for all kinds of packaging. For Paper & Board applications, Siegwerk offers flexographic inks for all standard forms of packaging – from corrugated cardboard to carrier bags and bags, tissues and serviettes to beakers and displays. Wrapping paper and shopping bags can also be printed excellently with the printing inks from Siegwerk. The user-friendly ink series reduces wash intervals, creates brilliant printing results even at high speeds, and allows for easy printing ink management. Alongside the very broad spectrum of varnishes and high-concentrate printing inks, the additional positive features include high productivity.



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