

Novastar® BCS BIO IML

GMP conform base colour ink series for label printing featuring variable drying speeds and wide choice of applications and substrates

Base colour ink series for sheetfed offset

Product features

- Novastar® BCS BIO IML is a modern, highly pigmented base colour ink series for sheetfed offset. Based on renewable raw materials it does not contain any drier, antiskin or waxes, therefore offering an extraordinarily wide range of applications. The series consists of 9 fast base colour inks plus black, a transparent white as well as an opaque white. The range is added by 2 high light fast bases.
- Novastar® BCS BIO IML is especially suited for In-Mould-Labeling and is produced GMP conform.
- Novastar® BCS BIO IML is particularly suited for the production of packaging that complies with the requirements of the EU-regulation 1935/2004 and 2023/2006 as well as with the Swiss Ordinance 817.023.21. Additionally the series meets the requirements of the EuPIA Guideline „Printing Inks applied to the non-food contact surface of food packaging materials and articles. Mineral oil is not used as an intentional formulation component of this series.
- With the help of the Flint Group mixing books (see page 3 below) Novastar® BCS BIO IML is optimally suited for mixing colour shades of the PANTONE® guide. Besides that it can also be used to mix any other colour shade with specific fastness properties, as is often required in label printing. Depending on the added drier or antiskin, spot colours with a wide variety of drying or setting characteristics can be produced. The scope ranges from duct-fresh up to oxidative drying, a feature that is ideal for printing on metalized or foils.
- The series is excellently suited both for the latest generation printing presses and machines of older design and construction.

Advantages of Novastar® BCS BIO IML

- In-Mould Labelling.
- GMP conform, usable for label printing in the food sector.
- Variable drying properties.
- Wax free.
- Wide range of application.
- Useable on a variety of substrates.
- Highly pigmented.
- High brilliance.

Novastar® BCS BIO IML

Novastar® BCS BIO IML	article code	Fastness properties/opaqueeness							Printing properties						
		Opaqueeness	Light 100 %	Light 10 %	Ethanol	Solvent mixture	Alkali	Caustic soda solution	Gloss	Setting	Oxidative drying	Rub resistance	Rapid further processing	Suitability for coated papers/board	Suitability for uncoated papers/board
								6	6	**	4**	6	7	7**	7**
Yellow	VZ24-100*	t	5	3	+	+	+		1 = Characteristic weakly expressed 7 = Characteristic strongly expressed						
Orange 021	VZ24-200*	t	5	3	+	+	+		<p>The assessment of the colour properties was made under standardised printing conditions. In individual cases, under special conditions, as in printing with very high ink densities, the classification of certain properties may be different.</p> <p>Light fastness properties according to ISO 12040: from 1 (low) to 8 (high) Fastness properties according to ISO 2836: + = Good Resistance +/- = Partly Resistant - = Not Resistant Opaqueeness: o = opaque so = slightly opaque t = transparent</p> <p>* Depending on the producing site ** Depending on the property and dosage of the added additive/additives.</p>						
Red 032	VZ24-302*	so	5	3	+	-	+								
Rubine Red	VZ24-301*	t	5	3	+	+	-								
Alkali Rst. Rubine Red	VZ24-346*	t	5	4	+	+	+								
Rst. Rhodamine Red	VZ24-369*	t	7	5-6	+	+	+								
Resistant Violet	VZ24-450*	t	7	6	+	+	+								
Process Blue	VZ24-500*	t	8	6-7	+	+	+								
Green	VZ24-600*	t	8	6-7	+	+	+								
Black	VZ24-960*	o	8	8	+	+	+								
Transparent White	VZ24-000*	t													
Opaque White	VZ24-001*	o			+	+	+								

Highest Light fastness	Product number							
Resistant Yellow	VZ24-153*	t	6-7	5-6	+	-	+	+
Y/S Red	VZ24-355*	t	7	6	+	+	+	+

You are welcome to contact us for further information.

The aim of our technical documents is to inform and advise our customers. The information provided herein is correct to the best of Flint Group's knowledge. No liability for any errors, facts or opinions is accepted. Customers must satisfy themselves as to the suitability of this product for their application. No responsibility for any loss as a result of any person placing reliance on any material contained herein will be accepted.

Flint CPS Inks Germany GmbH
 Commercial, Publication & Sheetfed Inks
 Sieglestrasse 25
 70469 Stuttgart, Germany

T +49 711 98 16-0
 F +49 711 98 16-700
 sheetfed@flintgrp.com
 www.flintgrp.com

Product names followed by ® are trademarks registered by Flint Group (represented by Flint CPS Inks Holdings LLC or Flint CPS Inks Germany GmbH). PANTONE® is a registered trademark of Pantone, Inc.

Novastar® BCS BIO IML

Drying properties

Novastar® BCS BIO IML doesn't contain drier, antiskin and waxes.

Substrates

Depending on the addition of additives, ideally suited for coated papers, as well as metalized papers and foils.

Hints for mixing spot colours

Due to the high colour strength and mono-pigmentation, the base colour inks of Novastar® BCS BIO IML are ideally suited for the easy formulation and mixing of spot colours, and in particular if special fastness requirements are needed. The whole range of PANTONE® colour shades can be achieved with typical wet offset printing film weights.

Mixing books/ calibration data

Mixing formulae for all PANTONE® C and U colour shades are available in the Flint Group BCS mixing book Digi Match. Mixing books, as well as calibration data for computerised ink formulation with X-Rite Ink formulation can be made available upon request.

Additives

Novaspot® 3107 drying paste:	to adapt the drying properties, cobalt-free
BCS Antiskin 19 795:	to enable duct-fresh properties
BCS Wax Compound:	to improve the rub resistance without coating
Printing oil L:	thinner

Mixing formula examples

Novastar® BIO – duct fresh for WBC coating

Novastar® BCS BIO IML Base Colour Mix	0-95.5 %
Novastar® BCS BIO IML Transparent White	Rest
BCS Antiskin 19 795 (VU10-072*)	max. 0.5 %
Novaspot 3107 Paste Drier (VU10-070*)	max. 4.0 %
Sum	100 %

Novastar® BIO – duct fresh without WBC coating

Novastar® BCS BIO IML Base Colour Mix	0-95.5 %
Novastar® BCS BIO IML Transparent White	Rest
BCS Wax Compound VU1A-000*	max. 5.0%
BCS Antiskin 19 795 (VU10-072*)	max. 0.5 %
Novaspot 3107 Paste Drier (VU10-070*)	max. 4.0 %
Sum	100 %

Novastar® BIO – oxidative drying, for non-absorbent substrates

Novastar® BCS BIO IML Base Colour Mix	0-97 %
Novastar® BCS BIO IML Transparent White	Rest
BCS Wax Compound VU1A-000*	max. 5.0%
Novaspot 3107 Paste Drier (VU10-070*)	max 4.0 %
Sum	100 %

Novastar® BCS BIO IML contains no waxes, depending from the end application wax paste must be inserted into the formulation.

To adapt viscosity and tack 1 – max. 3 % printing oil L can be added.

You are welcome to contact us for further information.

The aim of our technical documents is to inform and advise our customers. The information provided herein is correct to the best of Flint Group's knowledge. No liability for any errors, facts or opinions is accepted. Customers must satisfy themselves as to the suitability of this product for their application. No responsibility for any loss as a result of any person placing reliance on any material contained herein will be accepted.

Novastar® BCS BIO IML

Further IML Series

Novastar® D 2000 IML BIO – GMP conform, oxidative drying process series for label printing
Novastar® BIO IML spot colours – print ready, individual matched spot colours for label printing
Novaset® 4940/40 IML – high quality, low migration coating especially for IML applications

Migration test

A migration test according to DIN EN 14338 was made under worst case conditions (320% ink coverage) on Invercote 180 g/m². The test revealed that the migration of substances fell below the 60ppm limit by a factor of more than 10. (Based on the EU convention whereupon 6 dm² packaging surface correlates with 1 kg food).

Exceptions

After adding drier into the ink, a sensory neutrality can no longer be achieved. This is due to some small amounts of cleavage products which result from the oxidative drying process and which cause the characteristic odour of a dried offset ink.

Further information

For further information please refer to our Technical Reviews “Sheetfed colours for packaging printing” and “Processing Guideline Novastar D 2000 IML BIO”.

More products. Streamlined access. Greater results.

Flint Group offers a uniquely powerful combination of products, services and expertise; giving you access to the industry's broadest range of pressroom products.

Inks & Coatings. Pressroom Chemicals. Blankets. Sleeves. Consumables.

Rely on us for consistency, reliability and customer focus. Our aim is to make it easier for you to achieve your business goals. With Flint Group products in your pressroom, you can run your business with confidence and peace of mind.

You are welcome to contact us for further information.

The aim of our technical documents is to inform and advise our customers. The information provided herein is correct to the best of Flint Group's knowledge. No liability for any errors, facts or opinions is accepted. Customers must satisfy themselves as to the suitability of this product for their application. No responsibility for any loss as a result of any person placing reliance on any material contained herein will be accepted.

Flint CPS Inks Germany GmbH
Commercial, Publication & Sheetfed Inks
Sieglestrasse 25
70469 Stuttgart, Germany

T +49 711 98 16-0
F +49 711 98 16-700
sheetfed@flintgrp.com
www.flintgrp.com

Product names followed by ® are trademarks registered by Flint Group (represented by Flint CPS Inks Holdings LLC or Flint CPS Inks Germany GmbH). PANTONE® is a registered trademark of Pantone, Inc.