

Novastar® D 2000 IML BIO

GMP-conform and Low Migration series for label printing

Special process inks series for sheetfed offset

Product Features

- Novastar® D 2000 IML BIO is an extremely fast oxidative drying series for In-mould-labels that is based on renewable raw materials and is produced GMP-conform.
- The main benefit of the Novastar® D 2000 IML BIO-series is extremely fast oxidative drying.
- The series is excellently suited for the latest generation printing presses and machines of older design and construction.
- Novastar® D 2000 IML BIO is particularly suited for the production of labels for food packagings that comply 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 intentionally added formulation component of this series.

Advantages of Novastar® D 2000 IML BIO

- In-Mould-Labeling.
- GMP-conform, usable for food packaging label printing.
- Especially for printing on foil and other non-absorbent substrates.
- Extremely fast oxidative drying.
- BIO-binders – based on renewable raw materials.
- Low Migration

Novastar® D 2000 IML BIO

	Fastness properties/Opacity				Printing properties									
	Light fastness	Alcohol	Solvent mixture	Alkali	Dot gain	Gloss	Setting	Oxidative drying	Rub resistance	Rapid further processing	Suitability for gloss coated papers/board	Suitability for uncoated papers/board	Suitability for matt coated papers/board	Suitability for foils
Novastar® D 2000 IML BIO Process Inks					5	5	3	7	7	5	5	5	5	7
Novastar® 1 D 2000 IML BIO Process Yellow	5	+	+	+	1 = Characteristic weakly expressed 7 = Characteristic strongly expressed									
Novastar® 2 D 2000 IML BIO Process Magenta	5	+	+	-	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. <div> Light fastness properties according to ISO 12040: from 1 (low) to 8 (high) Fastness properties according to ISO 2836: + = Resistance provided - = Resistance not provided </div>									
Novastar® 4 D 2000 IML BIO Process Cyan	8	+	+	+										
Novastar® D 2000 IML BIO Process Black	8	+	+	+										

Drying properties

Extremely fast oxidative drying.

Substrates

Foil and other non-absorbent substrates. Generally we recommend testing the drying behaviour and adhesion on the respective substrate before the production run.

Remarks

When printing plastic foil please consider the following special features:

- Lowest possible damping. With high damping there is the risk of retarded drying or inhibited final drying.
- Care should be taken that the ink does not start to dry in the press, therefore downtime should be avoided.
- The acidity of the offset damping solution should not be set too high, pH-value approx. 5.5.
- The interval between printing of the various colours should not be too long.
- Powder application and laying down in small stacks are both necessary. Regular ventilation is recommended. When printing foil generally coarse-grained powders should be applied.
- Based on the oxidative drying the Novastar® D 2000 IML BIO cannot be stated as a low odour series.
- Prints should be ventilated in order to minimise smell of volatile substances which are formed during oxidative drying.
- Store at room temperature.
- No hermetic packaging of the printed products.

The process series is suitable for printing work corresponding to ISO 12647-2.

Further IML series

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.

Exceptions

Not for direct food contact.

Additives and reducers

The Novastar® D 2000 IML BIO ink series is a print ready formulation. Usually, the addition of printing aids is not needed. If necessary, only products as approved by Flint Group are recommended. Products available on request.

Further Information

For further information regarding printing on foil and other non-absorbent substrates please refer to our corresponding Technical Review for Novastar® D 2000 IML BIO.

ISEGA

Certificate available upon request

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 Group
Packaging & Narrow Web
Sieglesstrasse 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 Group US LLC or Flint Group Germany GmbH). HKS® is a registered trademark of the HKS-Warenzeichenverband e.V.

Version: 05.11.2017 Page 2 of 2