

# Novaplast® BIO

The series for foil and other non-absorbent substrates

**Special process inks and base colour ink series for sheetfed offset**

## Product Features

- Novaplast® BIO is an extremely fast oxidative drying series for printing on foil and other non-absorbent substrates that is based on renewable raw materials.
- It consists of the process inks Yellow, Magenta, Cyan, as well as 9 mono-pigmented base colour inks, transparent white and opaque white.
- The main benefit of the Novaplast® BIO-series is extremely fast oxidative drying.

## Advantages of Novaplast® BIO

- Especially for printing on foil and other non-absorbent substrates.
- Extremely fast oxidative drying.
- BIO-binders – based on renewable raw materials.
- Low swelling.

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	In the shade of	Fastness properties/Opacity					Printing properties									
		Light fastness	Alcohol	Solvent mixture	Alkali	Opacity	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
<b>Novaplast® BIO Process Inks</b>							<b>5</b>	<b>5</b>	<b>3</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>7</b>
Novaplast® BIO Process Yellow	Process Yellow	5	+	+	+	t	1 = Characteristic weakly expressed 7 = Characteristic strongly expressed									
Novaplast® BIO Process Magenta	Process Magenta HKS® 25K Rubine Red	5	+	+	-	t	<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>									
Novaplast® BIO Process Cyan	Process Cyan HKS® 47K Process Blue	8	+	+	+	t										
Novaplast® BIO Process Black	Process Black	8	+	+	+	o										
<b>Novaplast® BIO Base Colour Inks</b>																
Novaplast® 1 S 102 BIO Yellow	Greenish Yellow	6	+	-	+	t										
Novaplast® 1 S 103 BIO Yellow	HKS® 03K Yellow	5	+	+	+	t										
Novaplast® 1 S 107 BIO Orange	HKS® 7K Orange	5	+	+	+	t										
Novaplast® 2 S 113 BIO Red	HKS® 13K Red 032	5	+	-	+	so										
Novaplast® 222 459 BIO Magenta	Resistant Magenta, caustic soda solution resistant	5	+	+	+	t										
Novaplast® 2 S 129 BIO Magenta	Resistant Magenta advanced light fastness	6-7	+	+	+	so										
Novaplast® 3 S 165 BIO Violet	Resistant Violet	7	+	+	+	t										
Novaplast® 4 S 141 BIO Blue	Resistant Reflex Blue	7	+	+	+	t										
Novaplast® 5 S 153 BIO Green	HKS® 53K Green	8	+	+	+	t										
Novaplast® 1 S 110 BIO transparent white						t										
Novaplast® 1 S 100 BIO opaque white						o										

Light fastness properties according to ISO 12040: from 1 (low) to 8 (high)

Fastness properties according to ISO 2836: + = Resistance provided  
- = Resistance not provided

Opacity:

o = opaque so = slightly opaque  
t = transparent

You are welcome to contact us for further information.

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<b>Drying properties</b>	Extremely fast oxidative drying.
<b>Substrates</b>	Foil and other non-absorbent substrates. Generally we recommend testing the drying behaviour and adhesion on the respective substrate before the production run.
<b>Remarks</b>	<p>When printing plastic foil please consider the following special features:</p> <ul style="list-style-type: none"><li>• Lowest possible damping. With high damping there is the risk of retarded drying or inhibited final drying.</li><li>• Care should be taken that the ink does not start to dry in the press, therefore downtime should be avoided.</li><li>• The acidity of the offset damping solution should not be set too high, pH-value approx. 5.5.</li><li>• Add up to 10% isopropanol alcohol to the damping solution.</li><li>• The interval between printing of the various colours should not be too long.</li><li>• 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.</li><li>• Store at room temperature.</li><li>• No hermetic packaging of the printed products.</li></ul> <p>The process series is suitable for printing work corresponding to ISO 12647-2.</p>
<b>Exceptions</b>	Not for use for food packages without functional barrier.
<b>Hints for the mixing of Novaplast®-spot colours</b>	With the base colours of the Novaplast® BIO series plus transparent white and black it is possible to mix spot colours – for example from the PANTONE® or HKS® range. Therefore formulations for coated papers must be chosen. The system is completed by a Magenta that offers all fastness properties (Novaplast® BIO 222 459), as well as a Magenta with additionally advanced light fastness (Novaplast® BIO 2 S 129).
<b>Additives and reducers</b>	The setting of Novaplast® BIO inks is such that no drying agents need to be added. Mineral oils are not suitable as reducers. We recommend Printing Oil L from Flint Group.
<b>Further Information</b>	For further information regarding printing on foil and other non-absorbent substrates please refer to our corresponding Technical Review.

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