Rely on us.SM

Opaque whites for sheetfed offset

Range Overview

Product features

- Opaque whites are used to cover backgrounds or as a component in colour mixing to achieve a covering effect.
- They are ready-to-print and their composition corresponds to the one of spot inks. Based on BIO-binders, they contain titanium dioxide instead of coloured pigments.
- Flint Group's opaque white range is designed to cater for a variety of needs, types of substrates and areas of application in sheetfed offset.
- Each base colour ink series is supplemented by a specific opaque white, which features the same printing properties as the base colour inks.
- All products of the opaque white portfolio offer a very good covering effect and good printability.

Advantages of the opaque white range

- Ready-to-print.
- For single printing and as a component in colour mixing.
- Very good covering effect.
- Good printability.
- Range caters for a variety of areas of application and types of substrates.
- Optimally matched to Flint Group's base colour ink series'.

FlintGroup

Opaque whites for sheetfed offset

Product	Product Code	Product features / Drying properties	Colour shade	Printing properties: Gloss	Setting	Oxidative drying	Rub resistance	Rapid further processing	Suitability for coated papers/board	Suitability for uncoated papers/ board	Suitability for metallized papers	Suitability for foils
Novavit® Easy Mix BIO opaque white	VI60-001*	Duct-fresh. As a component in colour mixing and for overprinting. Suitable for continuous printing.	un-toned	5	5	3	3	3	6	1	1	1
Novavit® BCS BIO INTENSIVE opaque white	VZ19-001*	Duct-fresh. As a component in colour mixing and for overprinting, higher concentrated. All purpose opaque white.	un-toned	5	5	2	3	2	6	1	1	1
Novavit® OG 6994 BIO BOARD opaque white	VI90-088*	Drying by oxidation and setting. Opaque printing ink for covering backgrounds in label printing.	strong blue-toned, fast	5	3	6	6	6	6	2	7	5
Novaspot® 182 337 BIO opaque white	VI90-020*	Drying by oxidation and setting. Opaque printing ink for covering backgrounds in label printing.	blue-toned, fast	5	3	6	6	6	6	2	7	5
Novaplast® 1 S 100 BIO opaque white	VI81-088*	Drying by oxidation only. As a component in colour mixing for non-absorbent substrates and for overprinting.	un-toned	5	3	7	6	5	5	4	5	7
Novasens® BCS PRIME opaque white	VZ94-001*	Drying by setting only. As a component in colour mixing for food packaging printing and for overprinting.	un-toned	4	3	1	2	3	6	3	1	1
Novaboard® BCS BIO INTENSIVE opaque white	VZ21-001*	Drying by oxidation and setting. As a component in colour mixing. Very good rub resistance.	un-toned	5	3	6	6	6	6	6	6	4

1 = Characteristic weakly expressed 7 = Characteristic strongly expressed

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.

* Depending on the producing site

Additives

All products are ready-to-print. With the exception of Novasens® BCS PRIME the following additives may be used to adapt viscosity and tack:

Printing oil L (VU20-019*) 1 - 3 % to adapt viscosity and tack

Reduxpaste 4800 BIO (VU10-032*) 2 - 5 % to adapt the tack

Never add dryers to Novasens® BCS PRIME or to the fountain solution. Only the below mentioned products are suitable as additives:

Novasens® PRIME Reducer (VU10-01Y*) 1 - 3 % to adapt viscosity and tack

Novasens® PRIME Reduxpaste (VU10-02D*) 2 - 5 % to adapt the tack

You are welcome to contact us for further information.

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

Opaque whites for sheetfed offset

Printability

Opaque whites are based on titanium dioxide, which achieves a very high opacity, however they have a higher density compared to the coloured pigments contained in offset inks. The particles are larger and harder. To reach a sufficient opacity, the concentration of titanium dioxide in opaque whites is very high. This results in specific properties with regard to their printability. Behaviour on plates and blankets differs from standard offset inks and the wash cycles may be shorter.

At colour change to opaque white, care must be taken that all ink rollers are thoroughly cleaned.

Achievable ink film thicknesses in offset printing are approximately 2,0 – 2,5 g/m².
The covering effect can be increased by printing twice and thereby the impression becomes smoother. To achieve optimum results in covering of backgrounds, we recommend to print the opaque white over two printing units. The following coloured inks can be printed wet-on-wet or wet-on-dry, however better effects can be achieved with wet-on-dry. When printing wet-on-wet, in certain cases it is necessary to adapt the tack of the following inks by adding Printing oil L or Reduxpaste 4800 BIO.
It has to be considered, that due to the limited ink film thickness transferred in offset printing and despite the high concentration of the opaque white, not all coloured backgrounds can be covered. Also the characteristic of the substrate plays an important role. The rougher and more absorbing the background is, the more difficult it is to cover completely.

Surface Finishing/ Fastness properties

As un-toned opaque whites don't contain pigments, no resistance requirements regarding subsequent surface finishing have to be considered.
Although the Novavit® OG 6994 BIO BOARD opaque white and Novaspot® 182 337 BIO opaque white for metallized paper are blue-toned, all required fastness properties for subsequent surface finishing are given.

Special Hints

In ink ducts equipped with foil, the foil may wear through due to the properties of titanium dioxide. Therefore, the foil must be re-tensioned in time or exchanged in accordance with the manufacturer's instructions.

Exceptions

With the exception of Novasens® BCS PRIME opaque white all products of the opaque white range are not for use on food packaging without functional barrier.

You are welcome to contact us for further information.

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