Base Bio ND-NW

The Base Bio ND-NW series is a base colour ink series for blending and features a wide choice of applications and substrates (paper, board and film) whilst offering variable drying speeds, high colour intensity, optimised rub resistance with the proper fastness. The Base Bio ND-NW series for mixing is a concentrated base colour ink series for sheetfed offset.

Product features:

- Base Bio ND-NW is a modern, high concentrated base colour ink series. This series is based on renewable raw materials and free of mineral oil. It does not contain any drier or wax, therefore offering an extraordinarily wide range of applications and suitable substrates.
- The technical varnishes and additives maximise press performance and enable formulation of spot colours which dry by penetration and/or oxidation. Due to the colour pureness of the bases the blended colours are clean and crisp.
- The Deutsche Druckfarben Base Bio ND-NW series is optimally suited for mixing colour shades from the PANTONE® colour guide. Next to that it can also be used to formulate any customised colour shade in different fastness variants.
- Depending on the formulation, that is to say addition of (anti-)drier, waxes and technical binders and additives, spot colours can be produced with a wide variety of drying and setting characteristics . The scope ranges from roller-fresh up to fast oxidative drying (hard dry). The last feature being ideal for printing on metalized and uncoated papers.
- Formulation of wax free variations is also one of the possibilities.
- The series is excellently suited both for the latest generation printing presses and machines of older design and construction .
- Further benefits of the Base Bio ND-NW series are the excellent colour intensity, high brilliance and very good setting properties.

Advantages of Mixing Base Bio ND-NW:

- Variable drying properties.
- Wide range of application.
- Useable on a variety of substrates.
- Highly pigmented.
- Excellent colour intensity.
- High brilliance.
- Very fast setting.

COLOUR CODE	BASIC SET OF COLOUR CONCENTRATES DESCRIPTION	LIGHT-FASTNESS 100%	10%	Nitro	Spirit	Alkali
CMB5100	DDF Base Bio ND-NW Yellow	5	3	+	+	+
CMB5200	DDF Base Bio ND-NW Orange	5	4	+	+	+
CMB5325	DDF Base Bio ND-NW Resistant Warm Red*	5	4	-	-	+
CMB5340	DDF Base Bio ND-NW Rubine Red	5	4	+	+	-
CMB5380	DDF Base Bio ND-NW Resistant Pink	7	7	+	+	+
CMB5410	DDF Base Bio ND-NW Resistant Violet	7	6	+	+	+
CMB5550	DDF Base Bio ND-NW Process Blue	8	7	+	+	+
CMB5600	DDF Base Bio ND-NW Green	8	7	+	+	+
CMB5900	DDF Base Bio ND-NW Untoned Black	8	8	+	+	+
CMB5000	DDF Base Bio ND-NW Transparent White					

* Please note that this base ink may tend to fade in particular in conjunction with elevated temperatures and when being used in small proportions.

COLOUR CODE	OPTIONAL ADDITIONAL COLOUR CONCENTRATES DESCRIPTION	LIGHT-FASTNESS 100%	10%	Nitro	Spirit	Alkali
CMB5360	DDF Base Bio ND-NW Resistant Rubine Red	6	5	+	+	+
CMB5520	DDF Base Bio ND-NW Reflex Blue	3	2	-	-	+
CMB5370	DDF Base Bio ND-NW Rhodamine Red	4	3	-	-	-
CMB5420	DDF Base Bio ND-NW Violet	4	3	-	-	-
CMB5020	DDF Base Bio ND-NW Opaque White					

BASIC SET OF TECHNICAL VARNISHES & ADDITIVES	DESCRIPTION
DDF Sheetfed composite varnish 915	The rheology of the composite varnish standardly provides intense colours with sufficient resistances for a wide range of applications . It contains varnish, wax and anti-setoff and makes the use of additional additives to adjust tack and viscosity almost always unnecessary.
DDF Foils composite varnish 935	Varnish for formulation of inks with (very) fast drying properties. Suitable for application on non-absorbent substrate.
DDF PE wax paste 410	Standard PE wax paste to create sufficient scuff - & rub resistances.
DDF PTFE wax paste 420	PTFE wax paste to improve rub resistances properties even further.
DDF Standard drier 110	Standard drier enabling proper surface - & through drying.
DDF High performance drier 120	Drier that creates fast surface drying and improves fastness of the ink film, so-called hard dry.

Printing Ink Formulation

Deutsche Druckfarben assists with standard ink formulation based upon the Base Bio ND-NW series for standard sheetfed applications on (un)coated papers and boards as well as recipes for wax free - and hard drying / high rub resistant formulations just as application on non-absorbent substrates. In almost all cases this can be done with the Basic Colour Set (1O) and the Basic Set of Technical Varnishes & Additives (6). For rare occasions Optional Additional Technical Additives are available.

OPTIONAL ADDITIONAL TECHNICAL ADDITIVES	DESCRIPTION
DDF Water Active Drier	Special drier incidentally used when applying very fast oxidative drying formulations.
DDF Anti-oxidant compound 100	Compound to prevent skinning of the ink.
DDF Tack-off Additive 301	Product to reduce the tack of the ink without changing the ink properties.
DDF Linseed Oil Reducer 250	A linseed oil product which reduces tack & viscosity. Improves tack stability on lower grade papers & boards.
DDF Anti-set off Additive 620	Compound to improve non-set off.
DDF Perfecting Additive 501	Product to prevent build up on the impression cylinder on perfecting presses.
DDF Anti-slip Additive 630	Additive that reduces the slip of the of the ink film.

Colour Recipies
Deutsche Druckfarben assists with providing all colour recipes of the PANTONE Plus guide as well as the formulations of HKS K & N colours. All for standard sheetfed application. The far majority (> 95%) of these colours can be mixed from the Basic Set of Colour Concentrates. Only in rare occasions there will be need for the Optional Additional Concentrates as mentioned above.
Depending upon (very specific) requirement the Base Bio ND-NW series can be extended with other base colours of yellow, orange, red or blue which represent other shading -and/or fastness properties.

Our data bases enable bespoke spot colour formulation in combination with photo-spectral measurement equipment, colour matching software and precise proofing equipment. Please contact us for assistance.

Lightfastness
Lightfastness is an important consideration especially when producing work for display work i.e. posters.
The Lightfastness figures details given are related to the full strength colour, if the colours are weakened with tint medium or printed as a screen these figures will be reduced.

DEGREES OF LIGHTFASTNESS	SUMMER	WINTER
Blue Wool Scale 3	4 - 8 DAYS	2 - 4 Weeks
Blue Wool Scale 4	2 - 3 WEEKS	2 - 3 MONTHS
Blue Wool Scale 5	3 - 5 WEEKS	4 - 5 MONTHS
Blue Wool Scale 6	6 - 8 WEEKS	5 - 6 MONTHS
Blue Wool Scale 7	3 - 4 MONTHS	7 - 9 MONTHS
Blue Wool Scale 8	OVER 1½ YEARS	

All the inks above are formulated for balanced intermixing and are available in 2.5 kg (on request), 20 kg pale and 200 kg drums. Please note that these products have a shelf life of 2 years from date of delivery.