

## Base Bio LM XP-N



The **Base Bio LM XP-N** series is a Low Migration base colour ink series for blending.

The main application of **Base Bio LM XP-N** inks are low odour and low migration packaging (folding cartons, wrappers, etc.) for the food, cosmetic, pharmaceutical or tobacco industry.

Packaging converters should assure themselves that the use of this product has been fully assessed for risk and that the packaging produced meets regulatory requirements for the intended use.

**Inline overprinting with an Aqueous coating is compulsory. Please make sure that these coatings comply with end use requirements.**

### Product features:

- Support the production of food contact materials which comply with all relevant regulations in EU, US and China.
- Allow the production of food packaging with very good organoleptic (low odour\*, taint\*, hexanal\*) properties as well as safe migration\* levels far below the overall (or global) migration limit of 60mg per 1 kg food (60ppm) or 10mg/dm<sup>2</sup> of packaging surface area referring to the "EU cube" where 1 kg food is packed in a surface of 600 cm<sup>2</sup>.
- Are based on oils and esters which are evaluated as non-toxic for the human body. There are no restrictions for the daily intake. Consequently, the European Food Safety Authority (EFSA) does not assign a Specific Migration Limit.
- Do not use Triarylcarbonium-pigments with complex anions (so-called "Fanal" pigments), due to their low resistances and potential contamination by cleavage products.
- Are vegetable based and mineral oil free.
- Base Bio LM XP-N inks do not contain Bisphenol A.
- Are available as a range of base inks for spot colour mixing.
- Do not dry by oxidation and therefore do not contain drying catalysts, based on heavy metals such as cobalt, manganese, etc.
- Base Bio LM XP-N is roller fresh.
- Further benefits of the Base Bio LM XP-N series are the excellent colour intensity, high brilliance and very good setting properties.

### Advantages of Base Bio LM XP-N:

- Useable on a variety of substrates.
- Highly pigmented.
- Excellent colour intensity.
- High brilliance.

COLOUR CODE	BASIC SET OF BASE COLOURS DESCRIPTION	LIGHT-FASTNESS		Nitro	Spirit	Alkali
		100%	10%			
CMB7100N	DDF Base Bio LM XP-N Yellow	5	3	+	+	+
CMB720N	DDF Base Bio LM XP-N Orange	5	3	+	+	+
CMB7325N	DDF Base Bio LM XP-N Resistant Warm Red	5	3	-	-	+
CMB7340N	DDF Base Bio LM XP-N Rubine Red	5	3	+	+	-
CMB7380N	DDF Base Bio LM XP-N Resistant Pin	7	5	+	+	+
CMB7410N	DDF Base Bio LM XP-N Resistant Violet	7	5	+	+	+
CMB7550N	DDF Base Bio LM XP-N Process Blue	8	7	+	+	+
CMB7600N	DDF Base Bio LM XP-N Green	8	7	+	+	+
CMB7900N	DDF Base Bio LM XP-N Black	8	8	+	+	+
CMB7000N	DDF Base Bio NLM XP-N 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 BASE COLOURS DESCRIPTION	LIGHT-FASTNESS		Nitro	Spirit	Alkali
		100%	10%			
CMB713N	DDF Base Bio LM XP-N G/S Yellow LF	7	5	-	-	+
CMB7327N	DDF Base Bio LM XP-N Resistant Red	7	5	+	+	+
CMB7355CN	DDF Base Bio LM XP-N Concentrate B/S Magenta	8		+	+	-
CMB7355N	DDF Base Bio LM XP-N B/S Magenta	5	3	+	+	-
CMB7360N	DDF Base Bio LM XP-N Resistant Rubine Red	6	4	+	+	+
CMB7500N	DDF Base Bio LM XP-N Resistant Reflexe Blue	7	5	+	+	+
CMB7520N	DDF Base Bio LM XP-N Resistant Blue	3	2	-	-	+
CMB7355CN	DDF Base Bio LM XP-N Concentrate Process Blue	8		+	+	+
CMB7020N	DDF Base Bio LM XP-N Opaque White					

### Printing Ink Formulation

Deutsche Druckfarben assists with standard ink formulation based upon the Base Bio LM XP-N series for standard sheetfed applications on (un)coated papers and boards.

### Colour Recipes

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 Base Colours. Only in rare occasions there will be need for the Optional Additional Base Colours as mentioned above. Depending upon (very specific) requirement the Base Bio LM XP-N series can be extended with another base colours of orange, and concentrates of B/S Magenta and Process 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.

*This technical instruction sheet is designed for your information and reference. It is based on and conforms to our current knowledge. However as actual application is affected by many factors over which we have no control, we are not liable for printing failures.*