

INKREDIBLE®

NATURA GA®

The special process series for organoleptically neutral print products - low migration

Food and consumables packages must be printed using sheet-fed offset inks that do not have any adverse effect on either the odour or the taste of the package contents. The development of a new, special vehicle and the use of specially selected solvents, raw materials and production methods has enabled us to create low-odour¹ sheet-fed offset inks.

Legislators – and, as a consequence, many manufacturers for branded goods – are increasingly turning their attention to printing inks and coatings, in particular with respect to their safe usage and application and the chemical substances employed in them. The **huber**group has stood up this challenge and clearly demonstrated how aware it is of its responsibilities from the very beginning, and is making every effort to ensure its products comply with the legal requirements by utilising the latest technological advances.

The **INKREDIBLE NATURA GA** ink series is a mineral oil-free ink system. Mineral oil-free printing inks are formulated on the basis of vegetable oils or vegetable oil esters.

Fastnesses

INKREDIBLE NATURA GA 5035		Echtheiten nach ISO 2836 / 12040				
		Light WS	Alcohol	Solvent mixture	Alkali	Drying/Setting
NATURA GA Yellow	41GAN5035	5	+	+	+	by setting only
NATURA GA Magenta	42GAN5035	5	+	+	-	by setting only
NATURA GA Cyan	43GAN5035	8	+	+	+	by setting only
NATURA GA Black	49GAN5035	8	+	+	+	by setting only

Naturally, in addition to the process colours, we can also formulate any shade you would like, including all corporate and spot colours, on the basis of **INKREDIBLE NATURA GA**.

Special properties

- Ink series for printing the non-food contact surface for food packaging made of paper and board
- Low migration according to EuPIA/PIJITF definition
- Overall migration < 10 mg/m²
- Organoleptic assessment of printed products produces excellent results („Robinson test“ EN 1230 Part 1 and Part 2)
- For articles that were filled, treated or stored for a longer time at higher temperatures (more than 70 °C), we recommend special inks from our CORONA-MGA series.
- **INKREDIBLE NATURA GA** inks can be used in a similar way to conventional inks and are suitable for use in all sheet-fed offset presses and on all absorbent stocks. The applied single film thickness should not exceed 2 g/m²

¹ The term „low-odour“ refers to prints that have been made with these inks

- Stable ink/water balance in the press
- Fast setting speed
- These inks dry solely through setting and not by oxidation. Due to their drying mechanism, prints made with **INKREDIBLE NATURA GA** inks do not offer very good rub resistance. For a sufficient rub resistance we recommend inline coating with organoleptically neutral, water-based coating
- The fact that the inks do not dry by oxidation means no substances develop that are organoleptically objectionable. One example of such substances are short-chain aldehydes. Printed products made using **INKREDIBLE NATURA GA** inks therefore also have a low hexanal content

Application instructions

Fount solution delivery and composition

It is best to keep the dampener setting low, particularly when ink coverage is low. The isopropanol concentration in the fount solution must not exceed 10 %, with a pH of 5.0 – 5.4.

Roller treatment

Due to the possible negative effect on printed packages with respect to odour and taste, the rollers must not be sprayed with Anti-drier or Inkfit. After washing the rollers, leave them to dry well.

Water-based coating delivery

We recommend water-based coatings ACRYLAC GA or ACRYLAC-MGA. The coating application rate should be set to the upper limit, in order to obtain an even coating layer. This approach also allows best possible performance regarding

- rub resistance
- setoff behavior in the stack

Storage/Converting

- Max. temperature in the stack 35 °C
- Drying time before converting should be at least 48 hours

Ink mixtures

INKREDIBLE NATURA GA inks may only be mixed with inks of the same type or with CORONA MGA inks.

Basic requirements for food packaging

Food packages must not transfer any substances to the goods packaged inside them that

- endanger human health,
- influence the odour or taste of the goods packaged,
- influence the composition or appearance of the goods packaged.

Sheet-fed offset inks that are used in the manufacture of food packaging in which the packaged food has direct contact with the unprinted inside of the packaging must therefore be low-migration inks and have no adverse effect on either the odour or the taste of the packaged foodstuffs.

INKREDIBLE NATURA GA is a low migration and low-odour offset ink series. These inks are mineral oil free formulated and do not contain any drier to support drying by oxidation.

All raw material used to manufacture this ink series are selected according to EuPIA Guideline and they are listed in the Swiss ordinance on materials and articles in contact with food (SR 817.023.21).

Binders of **INKREDIBLE NATURA GA** are based on fatty acid ester which are approved for direct contact with food stuff. The inks are formulated and manufactured in compliance with EuPIA GMP. Regarding to „EuPIA Guideline on Printing Inks applied to non-food contact surface of food packaging materials and articles“ this ink series can be used to produce food packaging which are compliant to European regulation 1935/2004.

The manufacturer of the packaging has to make a risk assessment and an appropriate quality control to ensure that any migration to the packed good above the legal limits is excluded. Information on substances used or known to be present with the potential to migrate, including possible restrictions, is provided in the respective “Statement of Composition”, to allow members of the packaging chain to assess compliance of the printed packaging with the Framework Regulation (EC) No. 1935/2004 and/or Swiss Ordinance 817.023.21.

Printing auxiliaries

To tone down or brighten the colour, use our low-odour Transparent White **40GAN7550**. In order to prevent organoleptically active substances from forming, you should under no circumstances add siccatives of any kind.

To reduce ink tack, use only Print oil **10GAN1405** or paste reducer **10GAN9998**. Under no circumstances may standard printing oils, paste reducers or the like be used.

Classification

According to the Ordinance on Hazardous Substances: none

According to the Regulation of Flammable Liquids: none

Material Safety Data Sheet available on request. Please refer to the contact of your local supplier.

How supplied

2.5-kg vacuum-sealed cans