

# Technical Information

10.P.012 | Conventional Offset Systems | Ink Series, Process Inks

INKREDIBLE®

## ECO-PERFECT-DRY

The quick drying and fast setting sheet-fed offset process series based on renewable raw materials – mineral oil- and cobalt-free



ECO-PERFECT-DRY is the drying kinetic optimized quick drying and fast setting sheet-fed offset process series from hubergroup with high resistance to mechanical stress, for printing on a wide variety of substrates. Highly transparent and pure pigments enable to satisfy the specifications of ISO 2846-1 and/or ISO 12647-2, as well as a low tonal value spread between the four process colours, supporting a neutral grey balance in the entire tonal range.

With our cobalt- and mineral oil-free series we are already accounting for future European aspirations today.

### Range of applications

ECO-PERFECT-DRY is due to his drying kinetic with fast drying properties and quick setting behavior, especially suitable for rapid post finishing applications. It provides also a very good rub resistance, which is able to minimize the very substrate related problem of carboning.

This printing ink series is formulated mineral oil- and cobalt-free, but is not of the "low-migration" type. It is not recommended for the manufacture of food packaging.

### Properties

ECO-PERFECT-DRY		Fastness properties per ISO 12040 / ISO 2836			
		Light BWS	Alcohol	Solvent mixture	Alkali
Yellow	41 EP 350	5	+	+	+
Magenta	42 EP 350	5	+	+	-*
Cyan	43 EP 350	8	+	+	+
Black <sup>1</sup>	49 EP 350	8	+	+	+
Black <sup>2</sup>	49 EP 3501	8	-	-	+

1) varnish-solvent fast

2) alkali blue toned

\*) not suitable for poster printing

### Special products

ALPHA perfect		Fastness properties per ISO 12040 / ISO 2836			
		Light BWS	Alcohol	Solvent mixture	Alkali
Yellow	41 AP 5701	5	+	+	+

The semi-fresh ECO-PERFECT-DRY allows the ink to remain in the ink fountain overnight (sprayed with Antiskin). Washing the rollers is still mandatory when the press is idle.

- Very fast and thorough oxidative drying
- Excellent rub resistance and minimized carboning
- rapid post print finishing
- Colour shades in compliance with ISO 2846-1
- Perfectly fit for print production according to ISO 12647-2
- High fountain solution tolerance, Excellent stability in the production run
- Ideally suitable for IPA-free printing
- Cobalt- / mineral oil free
- Recommended for printing according to Blauer Engel, Nordic Swan, Österreichisches Umweltzeichen and EU-Ecolabel
- Certified and recommended for printing according Cradle-to-Cradle bronze level
- Cradle-to-Cradle silver level is obtained with the use of ALPHA perfect Yellow 41AP5701
- Suitable for the production of toys according to the EU Directive 2009/48/EC or the standard EN 71-3 Migration of Certain Elements;  
for the production of toys with the GS mark (Geprüfte Sicherheit – Safety tested) requirement

<b>Gloss</b>	low		very high
<b>Rub resistance</b>	moderate		very good
<b>Dot sharpness</b>	low		high
<b>Setting</b>	slow		very rapid
<b>Post print finishing</b>	slow		very rapid
<b>Perfecting</b>	limited		compatible

## Printing auxiliaries

ECO-PERFECT-DRY process inks are supplied ready to use. Should it become necessary, under exceptional circumstances, to adapt the process inks to special printing conditions, auxiliaries should be used which are compatible with the highly developed vehicle system:

- for reducing tack with substrates that are susceptible to picking **Ink Oil 10T1405**
- for accelerating oxidative drying **max. 1,5% INK ACTIVE DRIER MGA 10ML5002**

## 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.