

ALPHA foil 503

Special ink series for poorly- and low-absorbent substrates and metalized surfaces

Printing on surface-densified, low-absorbent and film-like substrates generally requires special printing inks based predominantly or entirely on vehicles which dry by oxidation. The stocks in question are usually very smooth and have no pores into which the ink or its constituents can penetrate and become physically anchored. Ink adhesion can also be impaired by release- and slip agents present on the surface, and by plasticizers.

Advice to the printer

- Since foil inks in most cases can dry only by oxidation, conditions are to be avoided or limited during printing which interfere with this drying mechanism:
 1. In wet offset, fount application should be kept to a minimum. (If ink transfer is too low, try switching to dry or providing additional ink consumption surfaces.)
 2. Avoid working in damp, cold areas.
 3. The pH of the fount solution must be above 5.
 4. We recommend using **HYDROFIX® B 801309** or **COMBIDRY 8200** as fount concentrate.
- Inks of ALPHA foil 503 series are delivered print-ready and don't need any additives. In case of difficult motifs or critical substrates with regard to drying characteristics, additives with drying agents such as **INK Active Drier 10T5002** (maximum application quantity 3%) could be used.
- Due to the fast drying characteristics of ALPHA foil 503 it is recommended to spray the ink duct and the rollers with **ANTISKIN 10T1200** for press downtimes.
- When printing, always carefully follow the product instructions provided by the manufacturer of the stock being used.
- These inks have a greater tendency to set off and stick. Correct delivery (i.e. as flat as possible) is therefore important. Pile height depends on the type of film, but is always very limited. A powder of appropriate grain size must be applied, and only the minimum ink film thickness should be used (UCR). To promote oxidative drying of the inks, make sure plenty of air is available.
- Soft PVC film is particularly difficult printing stock. The plasticizer in this material can interfere with ink drying or cause resoftening of dry ink long after printing. Satisfactory results on this material can be achieved only in exceptional cases.
- It is imperative to test prior to the production run whether the ink dries satisfactorily on the substrate used and its keying and rub resistance meet the requirements of the intended use of the prints.
- This publication printing ink series contains mineral oil and is not recommended to be used in packaging printing.

Properties

ALPHA foil 503		Fastness properties per ISO 12040 / ISO 2836			
		Light WS	Alcohol	Solvent mixture	Alkali
Yellow	41 AP 503	5	+	+	+
Magenta	42 AP 503	5	+	+	-*
Cyan	43 AP 503	8	+	+	+
Black	49 AP 503	8	+	+	+

* not suitable for posters

Classification

Safety data sheet available on request.

How supplied

1.0-kg vacuum-sealed can
2.5-kg vacuum-sealed can

Minimum order for special colours is 20 kg per shade.