

## Foil Specification

for the use on

all Hapa UV Flexo and DOD Systems

### Printing of aluminum foils, paper/alu foils (paper back)

- The foil should be coated on the outside with a colourless protective lacquer (without flexibilizer or additive) which is suited for subsequent printing with HAPA UV-flexographic inks.

- Ink Specification: HAPA flexographic inks hardening with UV light according to the cationic or radical drying technique. The ink type will need to be determined. See also code identifier for ink on the second page.

The heat of the sealing station or the autoclave is favourable for our UV inks in relation to the print adhesive strength.

Contrary to this are systems based on toner which badly tolerate heat.

- Seal Specification: The protective lacquer together with the printing in the sealing units should be resistant to temperatures of
  - up to max. 240° C with plate sealing
  - up to max. 240° C with rotating sealing

However the stability of the seal depends on the time and pressure of the sealing station (deep drawing machine). This has to be checked on-site by the user.

All other foil specifications such as quality, thickness, seal varnishing, dimensions and winding of the rolls, etc. have to be agreed upon with the manufacturer of the thermoforming machine.

Recommendation: **Before ordering a larger quantity of foil we recommend first to test 2 to 3 rolls of foil.**

Foil Suppliers: Most known foil suppliers are able to take into consideration the adequate protective lacquering on indication of the above mentioned information.

## UV Flexo Systems

### Survey of Suppliers

Supplier	Address	Lacquer on alu	Ink	Contrast quality
Alcan Kreuzlingen AG	Finkernstr. 34, CH - 8280 Kreuzlingen	LA2120	C, R	1
Alcan Singen GmbH	Alusingen-Platz 1, D - 78224 Singen	LA2120	C, R	1
Alcoa Packaging	321 Madison Ave. Erie, PA 16505, USA	C 12000	C	1
Alcoa Packaging	321 Madison Ave. Erie, PA 16505, USA	C 0140W	R	1
Aluberg S.p.a.	I - 24060 Bagnatica, Italien	31,S01	R	1
Carcano S.p.a.	I - 23826 Mandello del Lario, Italien	49.04.08	C	2
Hueck Folien	Postfach 1758, D - 92607 Weiden	STAR	C	1
Hueck Folien	Postfach 1758, D - 92607 Weiden	LHD	C	1
Patz	A - 2620 Natschbach/Loipersbach	58174000056	C*, R	1
Patz	A - 2620 Natschbach/Loipersbach	PZ 01000	C	2
Teich AG	Mühlhofen 4, A - 3200 Weinburg	58174000056	C*, R	1

## UV DOD Systems

### Survey of Suppliers

Supplier	Address	Lacquer on alu	Ink	Contrast quality
Alcan Kreuzlingen AG	Finkernstr. 34, CH - 8280 Kreuzlingen	LA2120	R	1
Alcan Singen GmbH	Alusingen-Platz 1, D - 78224 Singen	LA2120	R	1

1 = best contrast, 2 = less contrast (in relation to the above mentioned lacquers)

C = cationic ink

R = radical ink

\* = Except UV color serial no. 199-20-38-... and 199-20-39-...

Print and sealing tests performed by yourself are indispensable.

Printing of paper / aluminium foils see next page.

## Printing of paper / aluminum foils

Most of the suppliers mentioned on the previous page are able to deliver paper coated aluminum foils. All our **HAPA inks** perform excellent print results on paper. Please consult your foil supplier about this topic. Print and sealing tests performed by yourself are indispensable.

## Printing of synthetics aluminum foils or general synthetics foils

Not all synthetics foils can be printed without problems. If a corona treatment shows a poor result, further solutions are possible, as e.g. **chemically preprocessed PET films**. **Hostaphan** (Hoechst) and **Melinex** (ICI) are companies which supply such **chemically preprocessed PET films**, as e.g. **Hostaphan RNK 12 2600**. These products are applied, if the available surface of a foil is not at all or hardly printable. The PET films are available in all current material thicknesses and can be laminated on other foils. Subsequently printing with **Hapa inks** can be carried out. Please consult your foil supplier about this topic. Print and sealing tests performed by yourself are indispensable.

## Printing of lacquer/synthetics

Lacquers which are applied on synthetic foils by the foil supplier are another possibility to bind the **Hapa UV inks**. Please inform yourself directly at Hapa AG. Print and sealing tests performed by yourself are indispensable.

## Our provision of a service

In order to offer you an over-all solution regarding print and print binding, we have the possibility to test various **Hapa UV ink series** on the respective substrates (foils) at our facility. We are at your disposal for further questions regarding the printability of materials. We would like to offer you the execution of print tests of your foils in our print facility.

## Our recommendation

Because of the variety of practical conditions and the local influencing factors the above technical information can only be of recommendatory nature. These informations are reliable if used competently and adapted to the local conditions. They don't absolve the user from observing his own care. In consideration of the given conditions one's own verifications with original materials are indispensable. Hapa AG excludes any liability for damages caused by applications which do not comply with her information.