

#### PROPERTIES .....

- Longitudinally and transversely stretched polypropylene (BOPP) film coated on both sides
- ✓ No optical brighteners
- ✓ No plasticizers
- **✓** Waterproof
- Good edge tear strength
- ✓ Brilliant high-resolution print image

- Excellent whiteness
- ✓ High opacity
- Outstanding stiffness
- ✓ High strength
- ✓ Dimensional stability
- Chemical resistance; specific requirements must be tested in advance
- ✓ Temperature-resistant from approx. - 10°C to + 110°C, depending on duration, use and ambient conditions
- ✓ UV-resistant for approx. 1 year, depending on use and ambient conditions
- ✓ lahnit® can be recycled with PE, as a single type of plastic. Thermal recycling is possible.

#### PRINTING PROCESSES .....

# Conventional offset printing

- Film inks and/or inks allowing purely oxidative drying should be used.
- Wherever possible, use inks containing no mineral oil.
- Low dampening solution feed; too much water impairs drying.
- pH value should be between 6 and 6.5.
- Alcohol can be used, up to a maximum of 15 %.
- Powder can be used (fine grain size of  $15-30~\mu m$ ). The powder must be wiped off if there is to be a final varnishing.
- Drying agents can be used. The use of drying agents in the ink manufacturer's documentation should always be checked in advance.

- Stack height at exit should not exceed 600 sheets. This depends on the print product and ink coverage and should be checked on a regular basis to avoid ink transfer from one sheet to another.
- A drying time of between 12 and 24 hours should be allowed before postpress operations. Do not move the sheets during this time otherwise ink may be transferred from one sheet to another.
- With thinner films, minimise the printing pressure to avoid register problems due to material stretching.
- · IR drying is possible if suitable inks are used.
- Increased colour protection can be achieved by using a dispersion- or UV-varnish.

#### **UV** offset printing

- Operate UV dryers at a low heat setting.
- Stack temperature at delivery should not exceed 50°C.

#### HP Indigo digital printing

lahnit® can be used on HP Indigo presses without a primer from ink series 4.0.

#### PRINTING

- Acclimatise lahnit® in its sealed ream packaging in the pressroom at least 24 hours before printing.
- Ideal conditions in the printroom: 50 70 % relative humidity at 20 – 25°C room temperature.
- Max. feeder load 2000 sheets (approx. 20 – 30 cm stack height).

- Unpack lahnit® shortly before printing and fan out sheets well in order to allow smooth feeding. Attention, sheets must not crease!
- Remove unprinted sheets from the feeder and store in sealed packaging. When sheets remain unpacked for a longer period, e.g. overnight, the air between the individual sheets could exhaust, which may cause problems during feeding.
- Optimum runnability can be achieved using an ionization system in the pressroom.
- Do not stack pallets! lahnit® can be stored for approximately 2 years in its sealed packaging. It should be stored at a temperature of between 0°C and +40°C.

#### POSTPRESS .....

## **Folding**

- The first fold should always be made in cross-machine (CD) direction.
- · Automatic folding machines can be used.
- Pre-creasing is recommended with higher grammages.
- Once folded, products should be weighted down for a time to stop them springing open as films typically do.
- If further processing steps are required after folding, each step needs prior testing for this application.

## Embossing / foil embossing

- Blind embossing is possible but is not as effective as on paper.
- Recommended processing temperature for hotfoil embossing: approx. 80 – 90°C.

# Binding / gluing

- · Hot melt adhesive binding
- Thread stitching is possible
- Round perforations should be used for spiral binding; square perforations are not recommended because of their sharp corners.
- Other adhesives: polyurethane adhesives, transfer adhesive tape (e.g. Herma 1011 or Regiotape RT10924).
- Adhesive binding should be tested prior to production.

# Varnishing

- Varnishing is possible with UV varnish and water/oil-based offset varnishes.
- In the case of subsequent varnishing, the ink must be dry on the film and free of dust and powder residue.

# Cutting, die-cutting, creasing, perforating, stitching and eyeing

- All tools should be kept clean, sharp and free
  of burrs to stop the film tearing. Tool wear is
  more rapid with film than with paper.
- The pressure of the press crosshead should be minimized for cutting. Fanning out of sheets after cutting stops them sticking together.
- When die-cutting, the blanks should have rounded rather than sharp corners.
- Stitches and perforations should be tested in advance.
- Metal eyelets may be used.

OUALITY /	PRODUCT	RANGE
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<b>lahnit®</b> 100.080 // white	100 μm	lahnit® 180.128 // white	180 μm	<b>Lahnit®</b> 350.265 // white 350 μm
<b>lahnit</b> ® 120.090 // white	120 µm	<b>lahnit®</b> 200.140 // white	200 μm	
<b>lahnit</b> ® 150.110 // white	150 μm	lahnit® 250.195 // white	250 μm	Standard sizes (Other sizes available on request)  ✓ 70 x 100 cm, CD x MD

MD = machine direction, CD = cross direction; observe direction for folded products. Other sheet sizes and technological data sheets on request.

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