



## Ref. 842 / 800 / 874 — KPK Kraft/PET/Kraft laminate

ARGIPRINT® KPK / adhesive-free three-layer laminate / mechanical fastening

### DESCRIPTION

Flexible three-layer laminate consisting of an electrical-grade PET film faced on both sides with a high-performance speciality paper. The material carries no adhesive: the tag is not stuck on, it is fastened to the part mechanically with wire, a cable tie, a clip, a bolt, a hook or by insertion. It is designed for labelling systems subjected to heat treatment and high mechanical stress, such as lamination and extrusion processes. It retains its dimensional stability during short exposures to high temperature, and its satin finish helps the material slide. The range comprises three models, which differ only in the thickness of the PET core and in the temperature range.

### QUICK SUMMARY

**Material:** Kraft / PET film / Kraft laminate, white

**Adhesive:** None — mechanical fastening

**Models:** KPK 842, KPK 800 and KPK 874

**Printing:** Thermal transfer and laser

#### Key points

- Three thicknesses: 0.18, 0.21 and 0.24 mm
- High temperature for short exposures
- Dimensional stability throughout the thermal cycle
- Electrical-grade PET core
- Rolls up to 1,000 mm wide

### KEY ADVANTAGES

- No adhesive: mechanical fastening does not give way under heat or chemical attack, which is exactly where conventional adhesives fail.
- Good behaviour at high temperatures for short periods, retaining its dimensional stability.
- Electrical-grade PET film core, which provides the laminate's mechanical strength and stability.
- Satin finish that helps the material slide on the line.
- Easy to print on all commonly used systems.
- Three models with the same construction: only the core thickness and the temperature range change.

### RECOMMENDED APPLICATIONS

- Identification of parts that pass through an oven or a heat-treatment process.
- Lamination and extrusion processes.
- Industrial labelling where the part is subjected to high mechanical stress.
- Applications in which a self-adhesive material cannot be used.

### PRINTABILITY

The Kraft face can be printed by thermal transfer and by laser. The manufacturer describes it as easy to print on all commonly used systems. For thermal transfer, use a wax-resin or resin ribbon and validate the combination of ribbon and printing



parameters before starting production: legibility after the thermal cycle depends as much on the ink as on the material. If you need the right ribbon, we can supply that too.

## MATERIAL STRUCTURE

| LAYER   | MATERIAL | DESCRIPTION                                                                                                                         |
|---------|----------|-------------------------------------------------------------------------------------------------------------------------------------|
| Face    | Kraft    | High-performance speciality paper. Satin finish, printable by thermal transfer and by laser. White.                                 |
| Core    | PET film | Electrical-grade polyester film. Provides the laminate's mechanical strength and dimensional stability.                             |
| Reverse | Kraft    | Second layer of the same speciality paper. It protects the core and balances the laminate, and allows identification on both sides. |

## THE THREE MODELS

| PROPERTY                           | KPK 842   | KPK 800   | KPK 874   |
|------------------------------------|-----------|-----------|-----------|
| Total thickness (mm)               | 0.18      | 0.21      | 0.24      |
| Tolerance (mm)                     | ± 0.02    | ± 0.02    | ± 0.02    |
| Total grammage (g/m <sup>2</sup> ) | 208       | 246       | 281       |
| Paper grammage (g/m <sup>2</sup> ) | 80        | 80        | 80        |
| Paper thickness (µm)               | 72        | 72        | 72        |
| PET film thickness (µm)            | 23        | 50        | 75        |
| Manufacturer's reference           | EME T2370 | EME T5070 | EME T7570 |

## MECHANICAL PROPERTIES

| PROPERTY                   | KPK 842 | KPK 800 | KPK 874 |
|----------------------------|---------|---------|---------|
| Tensile strength MD (N/cm) | ≥ 120   | ≥ 170   | ≥ 200   |
| Tensile strength TD (N/cm) | ≥ 80    | ≥ 135   | ≥ 160   |
| Elongation MD (%)          | ≥ 1.5   | ≥ 1.5   | ≥ 1.5   |
| Elongation TD (%)          | ≥ 5     | ≥ 5     | ≥ 5     |

## TEMPERATURE AND CHEMICAL RESISTANCE

The manufacturer's data sheet describes excellent behaviour at high temperatures for short periods, retaining dimensional stability, but publishes no figures at all: no maximum temperature, no duration and no chemical resistance data. The ranges we work with in practice — up to 200 °C for the KPK 842, up to 320 °C for the KPK 800 and up to 350 °C for the KPK 874, always for exposures of up to ten minutes — and the resistance to 25–30 % hydrochloric acid found on pickling and galvanising lines do not come from that document. They are application values that must be validated with a sample under the actual conditions of the process, and under no circumstances do they correspond to continuous service at that temperature.



## SUPPLY FORMATS

| ITEM                   | VALUE                                                                                                  |
|------------------------|--------------------------------------------------------------------------------------------------------|
| Rolls                  | Untrimmed, up to 1,000 mm wide                                                                         |
| Reels                  | From 10 mm wide                                                                                        |
| Core internal diameter | 76 mm                                                                                                  |
| Colour                 | White                                                                                                  |
| Other formats          | Strips and die-cut or formed pieces made to drawing, on request. Also available in duplex (EM) format. |

## STORAGE

The manufacturer recommends storing the rolls in a dry, dust-free environment. No shelf life is published for this material: as it carries no adhesive, the usual expiry criterion for self-adhesive materials does not apply.

## USAGE RECOMMENDATIONS

- Select the model according to the actual maximum temperature of the process, not the thickness.
- Always validate with a sample under your actual process conditions before starting production.
- This is not a material for continuous service at high temperature: the temperature ranges apply to short exposures.
- As the material carries no adhesive, allow for the fastening system — wire, cable tie, clip, bolt, hook or insertion — and for the die-cut hole if one is needed.

## IMPORTANT NOTES

- The manufacturer's data sheet documents neither the maximum temperature nor the chemical resistance of this laminate. Please tell us the actual process temperature, the exposure time, the type of part, the fastening method and whether the line includes an acid bath, and we will confirm the right model for you.
- Manufacturer's reference: CAT-FILM® EME 3634. The three models KPK 842, 800 and 874 correspond to references EME T2370, T5070 and T7570.
- The technical specifications are general in nature; suitability for the end use is the purchaser's responsibility.

*This document is a technical data sheet for commercial use. For any advice on the suitability of the material, please contact us.*