## **Technical Data Sheet**

Pharma Packaging Innovations



## HC 135 3A

Transparent rigid PVC film, very good thermoformability for short cycle times at very low forming temperature. Film for pharmaceutical secondary packaging - medical devices.

Improved surface slip.

| Surface | glossy / glossy                   |
|---------|-----------------------------------|
| Colour  | transparent clear ( colour 0015 ) |

| Standard thickness | 300  | μm    | 400  | μm    |
|--------------------|------|-------|------|-------|
| Grammage           | 405  | g/m²  | 540  | g/m²  |
| Yield              | 2.47 | m²/kg | 1.85 | m²/kg |

| Properties                            |          | Test Method                                  | Value     | Unit      |
|---------------------------------------|----------|--|-----------|-----------|
| Thickness tolerance                   |          | DIN 53370                                    | ± 5       | %         |
| Tensile impact strength               |          | DIN EN ISO 8256 - A - 3                      | > 400     | kJ / m²   |
| Tensile strength                      |          | DIN EN ISO 527 - 3/2/50                      | > 48      | N / mm²   |
| Vicat softening temperature           |          | DIN EN ISO 306 VST B50<br>laminated specimen | 70 ± 2    | °C        |
| Dimensional stability (oven, hot air) |          | DIN 53377 140°C/10 min                       | MD / TD   | max       |
| Thickness                             | ≤ 400 µm |  | - 7 / + 2 | %         |
|                                       | > 400 µm |  | - 5 / + 2 | %         |
| Water vapour transmission rate        |          | ASTM - F 1249                                |           |           |
| Guide value for thickness 400 µm      |          | 38°C / 90% r.h.                              | < 3       | g / m²d   |
| Oxygen transmission rate              |          | ASTM - D 3985                                |           |           |
| Guide value for thickness 400 µm      |          | 23°C / 50% r.h.                              | < 15      | cm³ / m²d |

Complies with the requirements of the current version of European Pharmacopeia and with EU Regulation (EC) No. 10/2011 according to article 16 and 22 and amendments \*\* and with directive 94/62/EC. Production and quality controls according to ISO 15378.

\*\* Products placed on the market based on the requirements set out in Directive 2002/72/EC are still valid until 5 years after the adoption of the regulation.

The film should be stored in its original packaging at room temperature below 30 °C / 86 °F not directly exposed to sunlight and humidity and should be used within 24 months. Ideal storage conditions: 18 - 24 °C (64 - 75 °F), 40 - 60 % r.h. After transport and storage at cold temperature the film should be conditioned at minimum 24 hours to room temperature.

All information provided in this data sheet is based on our current best knowledge. The values presented in this data sheet are typical values and are not to be interpreted as product specifications. Changes in this datasheet are possible at any time and are not submitted to an automatic update to customers.