



Ref. HOT 150 / 151 — Printable polyimide film

ARGIPRINT° HOT / PI film with white coating / non-adhesive tag

DESCRIPTION

High-performance polyimide (PI) film with a special white printable coating, on one side on Type 150 and on both sides on Type 151. The material has no adhesive: the tag is not stuck on but mechanically fastened to the part. It is intended for the identification of metal pieces and profiles during production and heat treatment, where polypropylene and polyester are no longer viable. It offers very high thermal resistance in short-time exposures, good chemical resistance and high tear strength.

QUICK SUMMARY

Material: Polyimide film with white coating Adhesive: None — mechanical fastening Variants: Type 150 (1 side) and Type 151 (2 sides) Printing: Thermal transfer	Key points · Up to 450 °C for Type 150 and 500 °C for Type 151 · Short-time exposure values in all cases · High tear strength · Minimum elongation of 70 % · Rolls up to 500 mm wide
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KEY ADVANTAGES

- Very high thermal resistance: up to 450 °C for Type 150 and up to 500 °C for Type 151, in short-time exposures.
- White printable coating, on one side or on both depending on the variant.
- High tear strength — the property that makes a tag hung on or inserted into the part viable.
- Minimum elongation of 70 %, far above that of a paper laminate.
- No adhesive: mechanical fastening does not depend on an adhesive surviving the oven.
- Available in rolls and as labels cut to the dimensions you require, plain white or pre-printed.

RECOMMENDED APPLICATIONS

- Identification of metal pieces and profiles during production.
- Industrial heat treatment and curing ovens.
- Processes in which the material must enter and leave the oven with the part.
- Any application where PP and PET can no longer withstand the temperature.

PRINTABILITY

Printable by thermal transfer onto the white coating. The manufacturer's current data sheet recommends a 100 % resin ribbon, with a high printhead temperature and a medium to low printing speed; an earlier edition also allowed a wax-resin ribbon.

Validate the ribbon and the parameters before going into production: with this material, legibility after the thermal cycle depends as much on the ink as on the film. If you need the right ribbon, we can supply that too. Type 151 can be printed on both sides.



THE TWO VARIANTS

PROPERTY	TYPE 150	TYPE 151
Printable sides	1 side	2 sides
Total thickness (mm)	0.145 ($\pm 6\%$)	0.160 ($\pm 6\%$)
Weight (g/m ²)	204 $\pm$ 10	230 $\pm$ 12
Thermal resistance, short time (°C)	450	500
Colour	White / brown	White / white

MECHANICAL PROPERTIES

PROPERTY	UNITS	VALUE
Tensile strength, machine direction	MPa	> 160
Tensile strength, cross direction	MPa	> 135
Elongation	%	Min. 70
Tear strength	—	High

MATERIAL STRUCTURE

LAYER	DESCRIPTION
Coating	Special white coating, printable by thermal transfer. On Type 150 it is applied to one side; on Type 151, to both.
Base film	High-performance polyimide film. This is the layer that provides the thermal resistance, the chemical resistance and the tear strength.

TEMPERATURE

The manufacturer's data sheet gives the thermal resistance as a short-time value: 450 °C for Type 150 and 500 °C for Type 151. This is not a continuous service temperature, and the manufacturer publishes no figure for prolonged exposure. Please tell us the actual process temperature and how long the part remains in the oven, and we will confirm whether the variant is suitable.

CHEMICAL RESISTANCE

The manufacturer's data sheet states only that the chemical resistance is good, without specifying agents, concentrations or exposure times. We do not publish a list of products here, because no document from the manufacturer supports one. If your process involves an acid bath or any other specific agent, please let us know: we will advise you on the basis of what we know from real applications and, if necessary, run a test.



SUPPLY FORMATS

ITEM	VALUE
Rolls	Maximum width of 500 mm
Length	From 200 to 500 linear metres
Labels	Dimensions as per your requirements, in roll form or individual
Finish	Plain white or pre-printed

STORAGE

The manufacturer recommends keeping the material in a dry, dust-free area and avoiding exposure to sunlight during storage. No shelf life is published: since the material has no adhesive, the usual expiry criterion for self-adhesive materials does not apply.

USAGE RECOMMENDATIONS

- Choose the variant according to the actual process temperature and whether you need to print on both sides.
- The 450 and 500 °C figures are short-time values: do not specify this material for continuous service at that temperature without consulting us.
- As it has no adhesive, plan the fastening system — wire tie, clip, insertion into a slot or a drilled hole — and allow for the die-cut hole.
- Always validate with a sample under your actual conditions before going into production.

IMPORTANT NOTES

- The manufacturer itself warns that all values and recommendations are based on tests, measurements and experience and must be taken as indications: the purchaser must check the suitability of the material in each industrial process.
- The source data sheet does not detail the chemical resistance and does not document the behaviour under prolonged exposure. Please tell us your process conditions and we will advise you.
- Manufacturer's reference: ARGIPRINT° HOT 150/151.

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