

APX® 650

PREMIUM EXTRA - WAX/RESIN
FOR CORNER EDGE & NEAR EDGE

THERMAL TRANSFER RIBBONS

APX® 650 combines a multi receptor compatibility with good level of performance, especially in terms of mechanical resistances.

This high versatility allows it to fulfill the requirements of many applications.

The ink provides excellent printing quality of all types of barcodes, very small text, large characters and logos, at a blackness up to 1.7 (ODR).

The ribbon structure allows printing on various kinds of receptors, such as uncoated and coated papers and synthetics. The printed image offers a good level of smudge resistance, resistance to scratching and heat resistance up to 110°C.

Those characteristics remain at speeds up to 600 mm/s (24 ips), and with 200, 300 and 600 DPI printheads, making this ribbon perfectly adapted either to the labeling market or the packaging overprinting market.

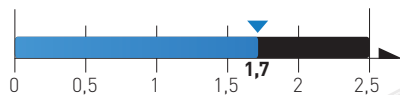
APX® 650 grade features ARMOR's outstanding backcoat technology, ensuring excellent printhead protection, preventing clogging and static build-up.

- ▶ VERY HIGH RESISTANCE TO SMUDGE AND SCRATCH
- ▶ EXCELLENT SENSITIVITY AND RECEPTOR MULTI-COMPATIBILITY
- ▶ VERY GOOD PRINTING QUALITY AT HIGH SPEED

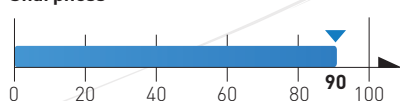
PRINTING QUALITY

Blackness

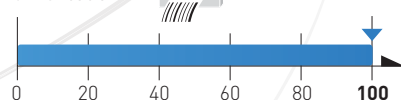
Macbeth D19C



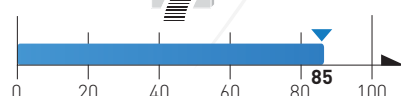
Sharpness



0°Barcode

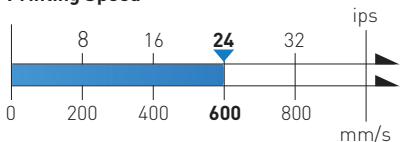


90°Barcode

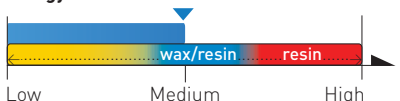


SENSITIVITY

Printing Speed



Energy



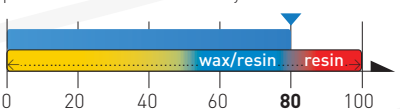
Receptor Compatibility

Uncoated papers	■
Coated papers	■ ■
High gloss papers	■ ■
Synthetics	■ ■

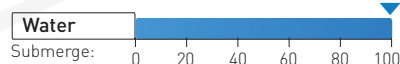
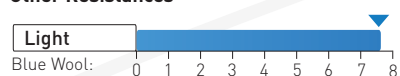
RESISTANCES

Mechanical Resistances

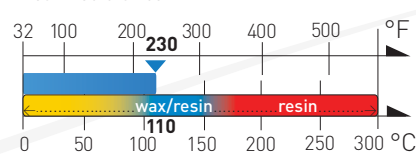
Crockmeter, 680 g/cm², printout still visible after 200 cycles.



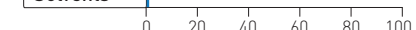
Other Resistances



Heat Resistance



Solvents



Evaluation of observed performances of the ribbon with optimized printer settings and receptors (ARMOR procedure).

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THERMAL TRANSFER RIBBONS

COLOR RANGE

Data exposed in this sheet are for the black ribbon. Printing performance of the color ribbons are close to black ones.



Black

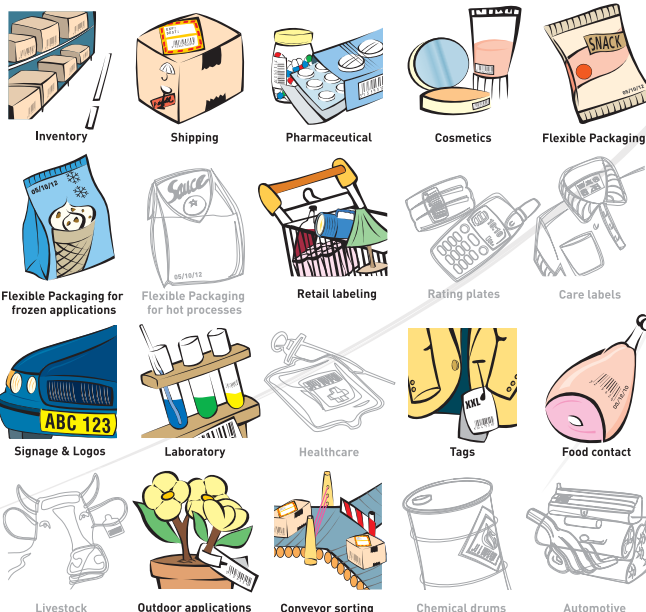


Metallic White
(877C)

For other colors, please refer to the APR® or AXR® color ranges with approaching performances.

EXAMPLES OF APPLICATION FIELDS

The characteristics of APX® 650 answer the requirements of the following application fields:
(If your application is not among the ones below, please contact us.)



CERTIFICATIONS AND APPROVALS

Food contact: This ribbon is compliant with the European Directive 1935/2004/EC.

UL Approved: Legibility and durability of the printed label.

Heavy metals: The ribbon is compliant with EC 95/638. SGS reports available upon request.

RoHs/WEEE: EC directives 2002/95 and 2002/96, compliance to the limitation of dangerous substances in electric and electronic equipments.

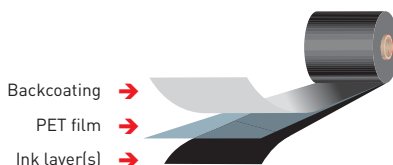
REACH: As a European manufacturer, ARMOR is completely fulfilling REACH requirements. Our ribbons are free from the Substances of Very High Concern (SVHC).

TSCA: The ribbon does not contain any substance of this list.

CP65: The ribbon is free from the substances listed except carbon black.

Contact us for all other regulations linked to product compliance with toxicity, treatment of wastes, banned components, packaging, etc.

RIBBON SPECIFICATIONS



Backcoating:
Silicon based.
Friction coefficient: $K_d < 0.2$.

PET film:
Thickness: 4.5 μm .
Tearing resistance: $> 300 \text{ N/mm}^2(\text{MD})$.

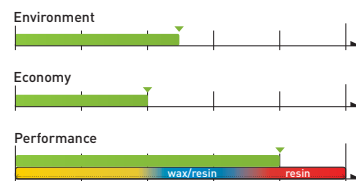
Ink:
Wax/Resin.
Melting point: 85°C
(ARMOR procedure).

Ribbon:
Thickness (black): $< 9 \mu\text{m}$.
The ribbon is anti static build-up treated.
Storage: 12 months, 5-35°C (40-95°F),
20-80 % Humidity Rate.

SUSTAINABLE DEVELOPMENT

ARMOR evaluation of APX® 650:

To be compared with our other grades.



The film is produced in one of the industry's most organized and awarded factories:

DECAPLAN:

Sustainable development action plan based on 10 leading topics involving all profiles of the company.

Global Compact:

UNO initiative inviting companies to apply fundamental ethical and environmental values.

Responsible Care:

International Council of Chemical Associations' charter towards constant improvements in health, safety and environment.

Quality, health, safety and environment certifications:

ISO 9001 : 2008, N°QUAL/2007/28312
ISO 14001 : 2004, N°ENV/2007/28315
OHSAS 18001 : 2007, N°SMS/2007/28316

AFAQ 1000NR (means millennium):

Evaluation of companies' state of advancement in sustainable development. ARMOR, 1st company to reach "Exemplary" level.