

APX[®]FH

PREMIUM EXTRA - WAX/RESIN
FOR FLAT HEAD

THERMAL TRANSFER RIBBONS

APX[®]FH is a new generation high performance wax/resin ribbon combining multi-receptor compatibility with outstanding performance.

The ink provides excellent printing quality for all types of barcodes, very small text, large characters and logos, at a blackness up to 2.1 (ODR).

The ribbon structure allows printing on a wide range of receptors, from coated papers to synthetics.

The printed image offers very high smudge and scratch resistance combined with heat resistance up to 150°C.

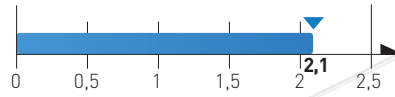
Those characteristics remain at speeds up to 300 mm/s (12 ips), and with 200, 300 and 600 DPI printheads, making this ribbon perfectly adapted to the labelling market.

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

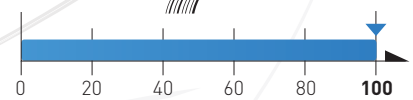
- ▶ **VERY HIGH RESISTANCE TO SMUDGE AND SCRATCH**
- ▶ **EXCELLENT SENSITIVITY AND RECEPTOR MULTI-COMPATIBILITY**
- ▶ **VERY GOOD PRINTING QUALITY AT HIGH SPEED**

PRINTING QUALITY

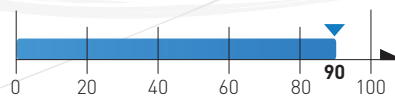
Blackness
Macbeth D19C



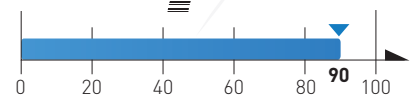
0°Barcode



Sharpness

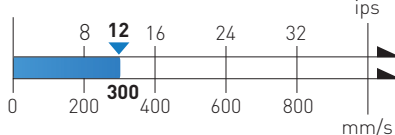


90°Barcode

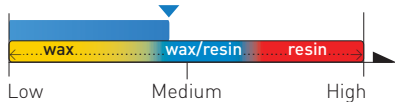


SENSITIVITY

Printing Speed



Energy



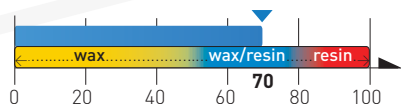
Receptor Compatibility

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

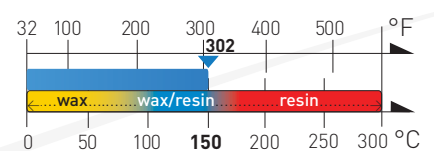
RESISTANCES

Mechanical Resistances

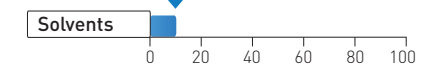
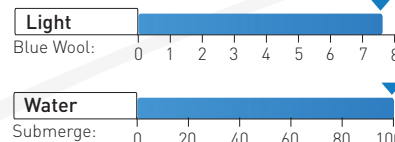
Crockmeter, 680 g/cm²,
printout still visible after 200 cycles.



Heat Resistance



Other Resistances



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

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COLOUR RANGE

For colour ribbons please refer to the APR[®] or AXR[®] ranges with similar performances.



Black

EXAMPLES OF APPLICATION FIELDS

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



Inventory



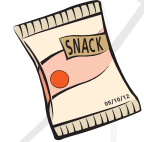
Shipping



Pharmaceutical



Cosmetics



Flexible Packaging



Flexible Packaging for frozen applications



Flexible Packaging for hot processes



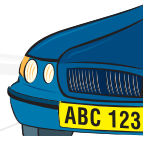
Retail labeling



Rating plates



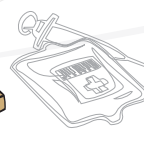
Care labels



Signage & Logos



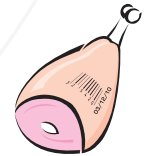
Laboratory



Healthcare



Tags



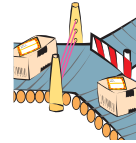
Food contact



Livestock



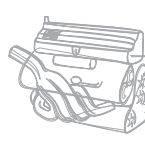
Outdoor applications



Conveyor sorting



Chemical drums



Automotive

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).

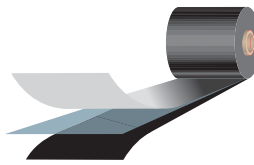
TSCA: The ribbon does not contain any substance of this list.

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 →
PET film →
Ink layer(s) →



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

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

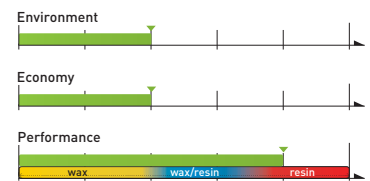
Ink:
Wax/Resin.
Melting point: 85°C
(ARMOR procedure).

Ribbon:
Thickness (black): $\leq 9 \mu\text{m}$.
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[®]FH:

To be compared with our other products.



The film is produced in one of the industry's most organised 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.

