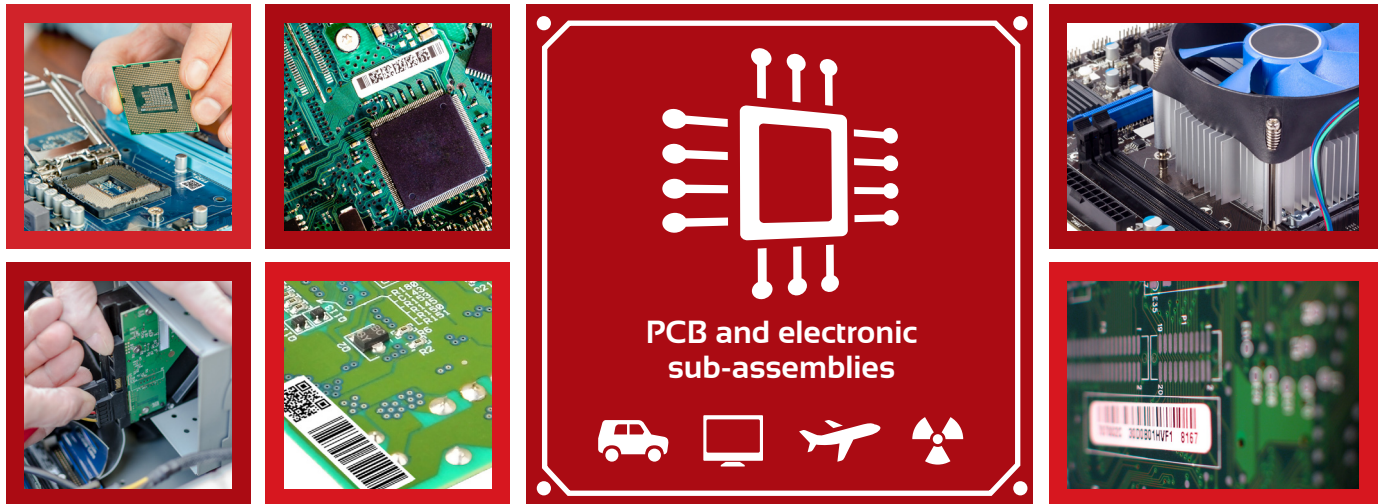


SPECIALITY RESIN FOR FLAT HEAD PRINTERS

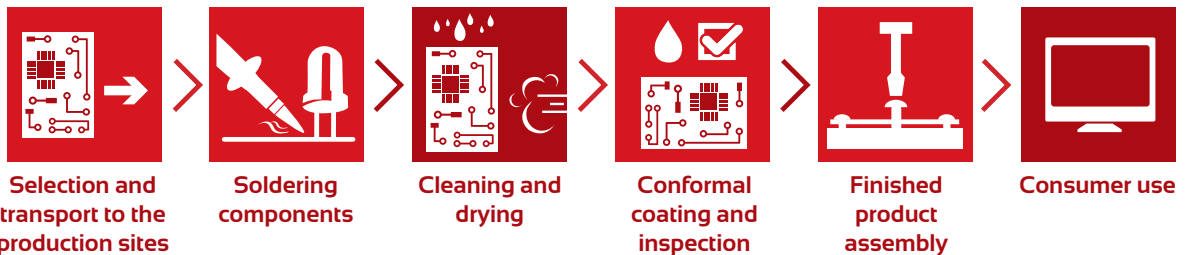
## Thermal Transfer ribbon by ARMOR dedicated to the electronics industry.

AXR®EL has been specially designed to meet ARMOR's high-quality standards, offering optimum durability in line with the highly specific demands of electronic products, particularly printed circuit boards.



### ELECTRONIC PRODUCT LIFE CYCLE

The manufacture and use of printed circuit boards involves various aggressive phases for product identification.



### AXR®EL: GUARANTEES LEGIBLE AND DURABLE PRINTING

- Ensures that information remains legible while withstanding to the stresses that the product is subjected to during its life cycle, from production involving aggressive substances to consumer use.
- Guarantees compatibility with the specific label materials used in the electronics industry: these must be resistant to high temperatures and the various treatments applied to the circuit boards.
- Protects both the environment and the user, a priority for ARMOR. AXR®EL is a halogen-free ribbon.



SPECIALITY RESIN FOR FLAT HEAD PRINTERS

## RESISTANCE

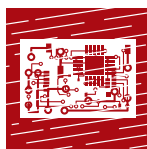


- Solvents
- ✓ IPA
- ✓ Exxsol™
- ✓ Aquanox®
- ✓ Vigon®
- ✓ Atron®
- ✓ Promoclean™
- ✓ Topklean™

The print remains perfectly legible with an A-grade under ANSI standard for barcode readability. Laboratory tests performed under simulated real-life conditions.

### • Temperature

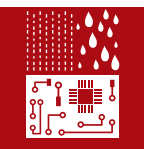
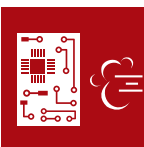
The print remains perfectly legible to high temperatures. Tested up to 300°C/572°F.



- Rubbing
- No degradation recorded after rubbing with an abrasive 16mm pad with an applied weight of 450g/cm<sup>2</sup> for 10 cycles.

### • Drying

The barcodes remain legible with an A-grade under ANSI standard for barcode readability. Laboratory tests performed under simulated real-life conditions.



- Conformal Coating
- The print remains intact after conformal coating (A thin polymeric film which conforms to the contours of a printed circuit board to protect the boards components).

## SUBSTRATE COMPATIBILITY

High gloss papers ..... ● ○ ○

Synthetics ..... ● ● ●

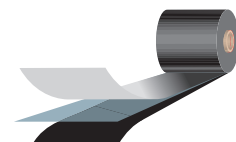
- ↳ Polyimide ✓
- ↳ Polyester ✓
- ↳ Acrylate ✓

## PRINTING CHARACTERISTICS

- Blackness: ODR: 1.80
- Sharpness: logos and small characters
- Barcode at 0°: ANSI A
- Barcode at 90°: ANSI A
- Printing speed: 8 ips - 203 mm/s

## RIBBON SPECIFICATIONS

- Backcoating: silicon-based
- Friction coefficient: Kd<0.2
- Ink: resin
- Melting point: 75°C/167°F
- PET film thickness: 4.5 µm
- Storage: 12 months, 5-35°C (40-95°F), 20-80% humidity
- Ribbon thickness: < 9 µm



## CERTIFICATIONS

- REACH/SVHC: 1907/2006/EC
- Halogen free: EN 14582: 2007
- Heavy metals: 2002/95/EC; 2002/96/EC; 2011/65/EC
- IPC A-610: Acceptability of electronic assemblies.
- EN 50419: Electronic equipment marking.

## SUSTAINABLE DEVELOPMENT

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



### Quality, Safety, Environment:

- ISO 9001: 2008
- ISO 14001: 2004
- OHSAS 18001: 2007
- ISO 50001: 2011



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



**Global Compact:** UN initiative inviting companies to apply fundamental ethical and environmental values.



All ARMOR product data sheets are available at our website [www.armor-tt.com](http://www.armor-tt.com)