

Markem-Imaje Tech Data Sheet**3910/3911 Thermal Transf**

PRODUCT: THERMAL TRANSFER RIBBON
 GRADE: 3910 (Inside Wound) --- 3911 (Outside Wound)
 MACHINE: SMARTDATE 2/3/5, --- CIMJET 300 Corner Edge, Series 18
 COLOR: BLACK, RED, GREEN, BLUE, WHITE

Ribbon Properties:

Film thickness: 4.5µm +/-0.3µm (nominal) by Micrometer
 Total thickness: <9µm (black) and <8.5µm (colors) by Micrometer
 Carrier: Polyester
 Ink composition: Resin
 Ink melt point: 180°C (nominal) by Thermometric
 Back coating: Static elimination coating to protect print head

Technical Data:

Designed for edge technology printers
 Excellent smudge and scratch resistance
 Excellent heat resistance - up to 180°C
 Excellent print quality on a variety of packaging substrates
 Capable of print speeds of up to 300mm/second - this may be increased when using APS mode on SmartDate3
 Ideal for printing on a variety of packaging films including polyethylene terephthalate, polyethylene, polypropylene and the coated paper.
 UL APPROVED

Product Performance

Based on a scale of 1 - 4 (1=poor, 4=excellent)
 Print Quality 4
 Scratch Resistance 3.5
 Smudge Resistance 3.5

Thermal transfer ribbons should be used at an operating temperature of 15°C to 35°C. Operating outside this range is poor. ~~customer's specific application should be evaluated by a Markem-Imaje Engineer. If the storage temperature is below 15~~

Shelf Life:

Thermal Transfer Ribbon: The "Use Before End" statement for TTR is 18 months from the date of manufacture. The 18 months is calculated using 12 months for the customer plus a potential Markem-Imaje stocking period of 6 months.

Storage:

This ribbon should be stored in an environment between 5°C and 35°C with a relative humidity between 20% and 80%. If manufacturing temperature is outside this range, the ribbon should be brought into this range an hour before use. As this is a heat sensitive product, heat (i.e. placing a box of ribbons near a radiator) or cold can affect the product performance. Also cause core shrinkage or expansion, which may cause the rolls to slip on the machine.

Important Notes:

- The materials used in formulating this product may present health or safety hazards as defined by the OSHA Hazard Communication Standard. Always consult the Material Safety Data Sheet for specific hazard information before using this product.
- No warranty for suitability of chemical products for specific applications is expressed or implied. The performance (transfer and permanence) of any ink is directly related to the cleanliness of the surface being printed. The specifications for these products are subject to change without notification or obligation.
- Contact Sales Support or your local Markem-Imaje representative for assistance with colors, related inks for other applications or any other application questions.

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