RD-514-B POLYIMIDE LABELSTOCK FOR THERMAL TRANSFER PRINTING

Description

RD-514-B is a high temperature thermal transfer printable labelstock. Designed to be printed with high performance resin based ribbons, RD-514-B will withstand temperatures up to 300°C and is resistant against many solvents and processing chemicals.

Applications

Electronic Industry : For underside of printed circuit boards and in surface mount applications.
Automotive Industry
Aerospace Industry
Metal processing
General Industrial applications requiring high temperature resistance and/or chemical resistance.

Properties

- Thermal transfer printing
- Suitable for barcode printing
- Smudge resistant

RD-514-B will withstand high temperatures including direct contact with molten solder

Resistance against Chemicals & Solvents

Test Method: Labelstock is applied to stainless steel plate and immersed in medium.

Medium	Test Duration	Result
Water at 95°C	8 hours	No effect*
Transformer oil at 23°C	24 hours	No effect*
Diesel oil at 23°C	24 hours	No effect*
Motor oil (SAE 30) at 23°C	24 hours	No effect*
Hydraulic oil (G.M Dextron II) at 23°C	24 hours	No effect*
Hexane at 23°C	24 hours	No effect*
Heptane at 23°C	16 hours	No effect*
White Spirit at 23°C	1 hour	No effect*
Jet Fuel A1 (ASTM D1655) at 23°C	24 hours	No effect*
Avgas 100LL (ASTM D910) at 23°C	24 hours	No effect*
Anti-Freeze solution at 23°C *1	24 hours	No effect*
Detergent solution at 23°C *2	8 hours	No effect*

* ADHESION TO TEST PLATE IS UNAFFECTED/SURFACE IS INTACT
*1 MIXTURE OF ETHYLENE GLYCOL AND WATER (1:1)
*2 WATER WITH 3% COMMERCIAL DETERGENT/ SURFACTANT

Recommended ribbons & printers	
Printer	**Recommended ribbons**
Fargo Prodigy Plus (203 dots/inch, 4 inch/sec speed, high burn setting)	Armor AXR 7+, AXR 8+, AXR 9+. Brady 4300, 4900. Sony 4075, 6075. Ricoh B-110A, B-110C, B-110CR, B-120E.
Zebra 90 Xi (300 dot/inch, 2 inch/sec speed, high burn setting)	Armor AXR 7+, AXR 8+, AXR 9+. Brady 4300, 4900. Sony 4075, 6075. Ricoh B-110A, B-110C, B-110CR, B-120E.
Zebra 91 (300 dot/inch, 2 inch/sec speed, high burn setting)	Armor AXR 7+, AXR 8+, AXR 9+. Brady 4300, 4900. Sony 4075, 6075. Ricoh B-110A, B-110C, B-110CR, B-120E.

Note: Above recommendations are based on tests with ribbons as supplied by Manufacturer. No guarantee is given in respect of performance of own branded ribbons or re-formulated versions of the above ribbons.

For Printed Circuit Board labeling applications, we recommend that the user evaluates compatibility of ribbon ink with flux employed during soldering operations.

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RD-514B

Technical Data	EN Value	ASTM Value
Supporting base:	Polyimide film	
Base thickness: **+/- 0.003 mm**	0.025 mm 0.050 mm	1.0 Mil 2.0 Mil
Total thickness: **+/- 0.005 mm**	0.075 mm 0.100 mm	3.0 Mil 4.0 Mil
Adhesive:	Acrylic	
Colour:	White	
Short term heat resistance:	Up to 300°C	
Interliner **Liner Thickness:** **Liner Area weight:** **Release force:**	Siliconised paper NS I-91 0.075 mm +/- 0.006 mm 91 +/- 4 g/m^2 Fasson 6-11 cN/25 mm BDF (A7475)6-12 cN/25 mm	

Additional Information
Minimum recommended application temperature : Room Temperature: 18°C (64°F) **Printing method:** Thermal Transfer. **Die cutting:** Rotary die-cutting is recommended. High winding tensions should be avoided. **Packaging :** Store roll labelstock and finished labels in plastic bags. **Handling:** Avoid contact with label surface. Processing environment should be kept clean and free from dust and dirt. **Storage Conditions:** Recommended storage conditions are 20°C (68°F) and 50% relative humidity

Adhesive Strength : 180° Peel, 10 min Dwell		
Surface	**EN Value**	**ASTM Value**
Stainless Steel	2.5 N/ cm + 0.5 N/cm - 0.8 N/cm	22.5 OZ/INCH
Aluminium	3.0 N/cm	27.0 OZ/INCH
Solder resist coated Printed Circuit Board	1.5 N/ cm	13.5 OZ/INCH
Polyimide Film	2.0 N/ cm	18.0 OZ/INCH
Powder Coated Surface	2.5 N/ cm	22.5 OZ/INCH

*Test according to ASTM D-1000/04, Section 46-53

Heat Resistance	
Temperature	**Time**
300° C (572°F)	15 minutes
250° C (482°F)	90 minutes
200° C (392°F)	240 hours

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