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I.S. EN ISO 9002

PPI – PRODUCT INFORMATION

L-139A ENe.doc
01/05/2006

L-139A POLYIMIDE LABELSTOCK FOR THERMAL TRANSFER PRINTING

Description
L-139A is a high temperature thermal transfer printable labelstock. Designed to be printed with high performance resin based ribbons, L-139A 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
Airmotive Industry
Metal processing
General Industrial applications requiring high temperature resistance and/or chemical resistance.

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

L-139A 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)	Sony TR4090, Sigma E, Sigma P, Keymax Alpha, Pelican T016, Ricoh D105A
Zebra 90 Xi (300 dot/inch, 2 inch/sec speed, high burn setting)	Keymax Alpha, Sigma P, Sony TR4090, Ricoh D105A
Zebra 91 (300 dot/inch, 2 inch/sec speed, high burn setting)	Keymax Alpha, Sigma P, Sony TR4090, Ricoh D105A

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 labelling applications, we recommend that the user evaluates compatability of ribbon ink with flux employed during soldering operations.

Technical Data	Din Value	Astm Value

Additional Information

Statements, technical information and recommendations contained herein are based on tests we believe to be reliable but they are not to be construed in any manner as warranties expressed or implied. The user shall determine the suitability of the product for his intended use and user assumes all risks and liability whatsoever in connection therewith.

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Supporting base:	Polyimide film	
Base thickness:	0.025mm 0.050mm	1.0 Mil 2.0 Mil
Total thickness:	0.065mm 0.090mm	2.5 Mil 3.5 Mil
Adhesive:	Acrylic	
Colour:	White	
Short term heat resistance:	Up to 300°C	
Interliner	Siliconised paper NS I-91	

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	**Din Value**	**Astm Value**
Stainless Steel	2.5 N/CM	22.5 OZ/INCH
Aluminium	3.0 N/CM	27 OZ/INCH
Solder resist coated Printed Circuit Board	1.5 N/CM	13.5 OZ/INCH
Polyimide Film	2.0 N/CM	18 OZ/INCH
Powder Coated Surface	2.5 N/CM	22.5 OZ/INCH

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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Seller's and manufacturer's only obligation shall be to replace such quantity of the product is proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use or the inability to use the product. Before using, users shall determine the suitability of the product for their initial use, and users assume all risk and liability whatsoever in connection with them.
No statement or recommendation not contained herein shall have any force or effect unless embodied in a written agreement signed by authorised officers of seller and manufacturer.

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