

## Technical Data Sheet

### Gloss White Polyimide (2mil) - 988

**General Description:** White 2 mil polyimide film with a permanent pressure sensitive acrylic adhesive, gloss white topcoat specifically designed for thermal transfer printing.

**Uses & Features:** 988 is a high quality material suitable for fixed or variable information labelling in very harsh environments, particularly in top and bottom side of printed circuit board applications, where tracking is required throughout the full manufacturing process. The label will withstand processes such as reflow, wave solder, and high pressure solvent cleaning with a variety of chemicals 988 is suitable for applications involving the higher temperature exposures associated with lead free solder processes. The 988 is considered to be Static Safe - When the \*label is peeled from its release liner, less than 50 volts of electrostatic charge is generated, making it considered safe to use in static free work environment.

\*Label – a 6.5mm X 8mm label.

**Properties:** The print resists smearing, abrasion, smearing, chemicals and harsh environments. This material is UL approved with the appropriate ribbons in file PGJ12.MH29261.

**UL Approved TT Ribbons:** Nortec 103, 104, 122, 140 Thermal Transfer Ribbons.

**Thickness:**

	Average Results USA Units	SI Units
Substrate	0.002 inch	0.05 mm
Adhesive	0.0016 inch	0.04 mm
Topcoat	0.00063inch	0.017 mm
Total	0.00423inch	0.107 mm

**Adhesion:** 988 show excellent adhesion to a wide range of surfaces during exposure to the harshest PCB manufacturing and cleaning processes.

All SI units are mathematically derived from U.S. conventional units.

**Note:** All values shown are averages and should not be used for specification purposes. Test data and test results contained in this document are for general information only and shall not be relied upon by Nortec customers for designs and specifications, or be relied on as meeting specified performance criteria. Customers desiring to develop specifications or performance criteria for specific product applications should contact Nortec for further information.

**Temperature performance:**

Performance properties	Test Method	Typical results
Short Term High Service Temperature	1 minutes at 572°F (300°C)	No visible effect to label
Short Term High Service Temperature	5 minute at 536°F (280°C)	Slight discoloration

Below -40c the adhesive becomes solid and losses it's tackiness force. How ever if the label is not subjected to any external force , the label will stay attached to the surface. The adhesive will regain it's full properties at temperatures above -40 c.

**RoHS Compliance:** The 988 does not contain any of the concerned substances in excess of the maximum concentration values in any homogeneous material according to EU directive 2002/95/EC.

**Shelf life:** Two years.

**Warranty:**

Nortec AMI recommends that a selected label type be thoroughly tested to insure it meets all end user requirements. Nortec AMI warrants only the purchaser that its products are free from defects in material and workmanship. Nortec AMI limits its obligation under this warranty and at its option to repair or replace the product. This warranty is in lieu of any other warranty, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. Nortec AMI is not liable for any damages, including lost profits, lost savings, or other incidental or consequential damages arising out of the use of or inability to use such product. Nortec Ami used in part information from materials manufactures and did not conduct all the test itself.

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