

# **Durable Print Solutions** PT700 White Polyester

## **Technical datasheet**

### July, 2009

#### Product PT700 White Industrial Polyester is a 50 micron, gloss white polyester labelstock designed description for thermal transfer printing. This product utilizes Adhesive 310E, a firm adhesive which resists oozing and provides high strength on a variety of surfaces including high surface energy (HSE) plastics and metals.

#### Product Descriptor / 7816EH 3M TT2 GW PET50-310E-90WG **Dispatch Labelling**

| Physical Properties<br>Not for specification purposes<br>(Calipers are nominal values) | Facestock  | k 50 micron gloss white polyester                       |  |  |
|--|--|---|--|--|
|  | Adhesive   | 20 micron 310E acrylic                                  |  |  |
|  | Liner  | 77 micron, 90 g/m <sup>2</sup> White Densified Glassine |  |  |
|  |  |   |  |  |
| Key Features   | • Facestock is topcoated for thermal transfer printing. Resin ribbons are recommended for optimum durability. The topcoat also provides improved ink anchorage for traditional forms of press printing |   |  |  |
|  | <ul> <li>Polyester facestock provides durability in harsh environments</li> </ul>  |   |  |  |
|  | <ul> <li>Adhesive provides high ultimate adhesion on a variety of substrates, and offers good<br/>chemical and UV resistance.</li> </ul>   |   |  |  |
|  | Densified glassine liner for consistent die cutting.   |   |  |  |
|  | • UL and cUL recognized (File Number MH18072)  |   |  |  |
| Applications   | • Barcode lab  | els • Rating plates                                     |  |  |
|  | • Pipe markir  | • Property identification                               |  |  |
|  | • Asset labell   | ing • Warnings & Instructions                           |  |  |
|  | <ul> <li>Service labe</li> </ul>   | els   |  |  |
| Performance  | Standard Test Conditions are 23°C and 50% Relative Humidity  |   |  |  |

### Characteristics

Not for specification purposes

180° Peel Adhesion tested using FINAT Test Procedure FTM 1 (300mm/min) 90°Peel Adhesion tested using FINAT Test Procedure FTM 2 (300mm/min)

| Adhesion        | 20 Minutes at<br>Standard Conditions |                           | 72 Hours at<br>Standard Conditions |                           |
|-----------------|--------------------------------------|---------------------------|------------------------------------|---------------------------|
|                 | <b>180° Peel</b><br>N/25mm           | <b>90° Peel</b><br>N/25mm | <b>180° Peel</b><br>N/25mm         | <b>90° Peel</b><br>N/25mm |
| Stainless steel | 11.8                                 | 8.4                       | 18.7                               | 12.1                      |
| ABS             | 11.6                                 | 8.3                       | 15.1                               | 11.3                      |
| Polycarbonate   | 12.9                                 | 9.4                       | 18.4                               | 11.6                      |
| Polypropylene   | 8.4                                  | 4.4                       | 11.0                               | 6.3                       |



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#### Performance Characteristics

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| Adhesion        | 72 Hours at 70°C           |                           | 72 Hours at - 40°C         |                           |
|-----------------|----------------------------|---------------------------|----------------------------|---------------------------|
|                 | <b>180° Peel</b><br>N/25mm | <b>90° Peel</b><br>N/25mm | <b>180° Peel</b><br>N/25mm | <b>90° Peel</b><br>N/25mm |
| Stainless steel | 20.7                       | 15.3                      | 17.6                       | 11.8                      |
| ABS             | 17.6                       | 12.7                      | 16.1                       | 11.5                      |
| Polycarbonate   | 18.7                       | 14.4                      | 17.6                       | 11.6                      |
| Polypropylene   | 7.7                        | 5.2                       | 10.8                       | 4.7                       |

| Adhesion        | 72 Hours at<br>40°C and 95% RH |                           |  |
|-----------------|--------------------------------|---------------------------|--|
|                 | <b>180° Peel</b><br>N/25mm     | <b>90° Peel</b><br>N/25mm |  |
| Stainless steel | 23.3                           | 15.1                      |  |
| ABS             | 17.0                           | 11.1                      |  |
| Polycarbonate   | 21.0                           | 9.0                       |  |
| Polypropylene   | 9.5                            | 3.7                       |  |

Liner Release tested using FINAT Test Procedures FTM 3 (180° removal of liner from face material at 300mm/min) FTM 4 (180° removal of liner from face material at 10m/min)

| Liner release | Rate of Removal | Release force | Units   |
|---------------|-----------------|---------------|---------|
| FTM 3         | 300 mm per min  | 15.5          | cN/50mm |
| FTM 4         | 10 m per min    | 5.7           | cN/25mm |

Temperature resistance of label applied to stainless steel. Other substrates should be tested as per application.

| Service<br>Temperature             | -40 to 150°C |
|------------------------------------|--------------|
| Minimum Application<br>Temperature | 5°C          |



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| Drococcing          | Drinting  |
|---------------------|---|
| Processing          | <ul> <li>Printing:</li> <li>Facestock is topcoated for improved ink receptivity and is designed for thermal transfer printing. Thermal transfer printing with resin ribbons is recommended for optimum durability. The topcoat provides improved ink anchorage for standard roll-processing methods including flexography, letterpress, and screen-printing.</li> <li>Die Cutting:</li> <li>Rotary die cutting is recommended. Fanfolding of labels is not recommended. Small labels</li> </ul>   |
|                     | should be evaluated carefully. Winding tensions should be kept at a minimum to help prevent the adhesive from oozing. Packaging: Finished be developed as a standard be strend in placetic base.  |
|                     | Finished labels should be stored in plastic bags.   |
| Processing          | For maximum bond strength, the surface should be clean and dry. Isopropyl alcohol is a typical cleaning solvent.  |
|                     | <b>NOTE:</b> When using solvents, read and follow the manufacturer's precautions and directions for use.  |
|                     | For best bonding conditions, application surface should be at room temperature or higher. Low temperature surfaces, below 5°C can cause the adhesive to become so firm that it will not develop maximum contact with the substrate. Higher initial bonds can be achieved through increased rubdown pressure.  |
| Storage             | Store at standard room temperature conditions of 21°C and 50% relative humidity.  |
| Shelf Life          | 24 months from date of dispatch by Rebo when stored in the original packaging at 21°C & 50 % relative humidity  |
| For Additional Info | To request additional product information or to arrange for sales assistance, go to: www.rebosystems.com  |
| Important Notice    | All statements, technical information and recommendations contained in this document<br>are based upon tests or experience that Rebo believes are reliable. However, many factors<br>beyond Rebo's control can affect the use and performance of a Rebo product in a particu-<br>lar application, including the conditions under which the product is used and the time and<br>environmental conditions in which the product is expected to perform. Since these factors<br>are uniquely within the user's knowledge and control, it is essential that the user evaluate<br>the Rebo product to determine whether it is fit for a particular purpose and suitable for<br>the user's method or application. All questions of liability relating to this product are gover-<br>ned by the terms of the sale subject, where applicable, to the prevailing law. |

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