

3M™ Thermal Transfer Polyester Label Material 7813EH



Product Description

3M™ Polyester Label Material 7813EH is a 75 µm, silver polyester labelstock with a matt print receptive topcoat. This product utilizes 3M™ Adhesive 300E, a modified acrylic adhesive which provides high strength on high surface energy (HSE) plastics and low surface energy (LSE) plastics.

Product Descriptor /Dispatch Labelling

7813EH 3M TT5 MS PET75-300E-90WG



Product Features

- TT5 topcoat provides a smooth matt surface, enabling excellent thermal transfer images at reduced burn temperature settings. The topcoat also provides improved ink anchorage for traditional forms of press printing.
- 300E is a modified adhesive, which and provides high ultimate adhesion on a variety of surfaces including high surface energy (HSE) and low surface energy (LSE). It additionally has improved chemical and UV resistance.
- 90 g/m² densified glassine liner assures consistent die cutting.
- UL and cUL recognized (File Number MH18072).



Typical Physical Properties

| | | |
|----------------------|----------------------------|--------------------------|
| Facestock | 75 µm | Matt Silver Polyester |
| Adhesive | 20 µm | #300E Acrylic |
| Liner | 77 µm, 90 g/m ² | White Densified Glassine |
| Service Temperature* | -40 °C to 150 °C | |

* Visual assessment: The samples were tested on stainless steel panels at -40 °C and 150 °C for 96 hours to assess the temperature range of the product.



Typical Adhesion and Liner Release Values

180° Peel Adhesion, Test Method: FINAT FTM1

Dwell Conditions: 20 minutes at 23°C, 50% RH

| | | |
|-----------------|------|---------|
| Stainless Steel | 13,7 | N/25 mm |
| ABS | 13,4 | N/25 mm |
| HDPE | 6,5 | N/25mm |

Dwell Conditions: 72 hours at 23°C, 50% RH

| | | |
|-----------------|------|---------|
| Stainless Steel | 16,1 | N/25 mm |
| ABS | 14,3 | N/25 mm |
| HDPE | 8,9 | N/25mm |

Dwell Conditions: 72 hours at 70°C

| | | |
|-----------------|------|---------|
| Stainless Steel | 20,7 | N/25 mm |
| ABS | 10,0 | N/25 mm |
| HDPE | 7,0 | N/25mm |

Dwell Conditions: 72 Hours at -40°C

| | | |
|-----------------|------|---------|
| Stainless Steel | 16,7 | N/25 mm |
| ABS | 14,4 | N/25 mm |
| HDPE | 7,6 | N/25mm |

Dwell Conditions: 72 Hours at 40°C & 95% RH

| | | |
|-----------------|------|---------|
| Stainless Steel | 19,1 | N/25 mm |
| ABS | 11,7 | N/25 mm |
| HDPE | 8,5 | N/25mm |

Liner Release, Test Method: FINAT FTM3

180° Removal of Liner

| | | |
|-----------------------------|-----|----------|
| Rate of Removal: 300 mm/min | 9,5 | cN/50 mm |
|-----------------------------|-----|----------|





Application Ideas

- Barcodes labels and rating plates.
 - Property identification and asset labeling in harsh environments
 - Warning, instruction and service labels for durable goods.
 - Nameplates for durable, electronic and sporting goods
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Processing

- Printing:

Facestock is treated for improved ink receptivity. Resin ribbons are recommended for optimum durability. It is printable by all standard roll-processing methods including flexography, hot stamp, letterpress, and screen-printing.

- Die Cutting:

Rotary die cutting is recommended. Fanfolding of labels is not recommended. Small labels should be evaluated carefully. Winding tensions should be kept at a minimum to help prevent the adhesive from oozing.

- Packaging:

Finished labels should be stored in plastic bags.



Special considerations

For maximum bond strength, the surface should be clean and dry. Isopropyl alcohol is a typical cleaning solvent.

NOTE: 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 and Shelf Life

Store at 16 °C – 25 °C and 40 – 65 % relative humidity. The product can be stored up to 24 months after manufacturing.



Further Technical Data

3M can offer extended data for different test conditions and substrates. Please get in touch with your 3M Sales Rep or Application Engineer.

Trademarks: 3M is a trademark of 3M Company.

Technical Information Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Precautionary Information: Refer to product label and Safety Data Sheet (SDS) for health and safety information before using the product. For information, please contact your local 3M Office. You can click or scan QR code to see contact detail or visit www.3M.com

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