3M™ Thermal Transfer Polyester Label Material 7818EH

Product Description

3M™ Polyester Label Material 7818EH is a 75 µm, silver polyester labelstock with a matt print receptive topcoat. This product utilizes 3M™ 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 /Dispatch Labelling

7818EH TT5 MS PET75-310E-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.
- Good print definition is combined with the advantages of chemical and abrasion resistance associated with a matt coating.
- 310E is a firm adhesive, which resists oozing and provides high strength on a variety of surfaces including high surface energy (HSE) plastics and metals. 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	#310E Acrylic
Liner	77 µm, 90 g/m²	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	17,3	N/25 mm
ABS	13,9	N/25 mm

Dwell Conditions: 72 hours at 23°C, 50% RH		
Stainless Steel	21,2	N/25 mm
ABS	17,8	N/25 mm

Dwell Conditions: 72 hours at 70°C		
Stainless Steel	26,3	N/25 mm
ABS	10,0	N/25 mm

Dwell Conditions: 72 Hours at -40°C		
Stainless Steel	21,1	N/25 mm
ABS	17,3	N/25 mm

Dwell Conditions: 72 Hours at 40°C & 95% RH		
Stainless Steel	27,2	N/25 mm
ABS	12,6	N/25 mm

Liner Release, Test Method: FINAT FTM3

180° Removal of Liner		
Rate of Removal: 300 mm/min	9,8	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.

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.