Tamper Indicating Polyester Label Material 76816

Preliminary Product Data Sheet

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Product Description

3M™ Tamper Indicating Polyester Label Material 76816 is a matt silver labelstock intended for use as a tamper indicating label or seal. Evidence of tampering is provided by the activation of a “VOID” message in the facestock when removal of the label is attempted.

Product Descriptor / Dispatch Labelling

76816 TT1 MS PET VOID 50ER-300E/25-90WG

Physical Properties

Not for specification purposes
(Calipers are nominal values)

Facestock	55 micron matt silver topcoated polyester
Destruct Pattern	VOID
Adhesive	25 micron acrylic
Liner	77 micron, 90 g/m² White Densified Glassine

Key Features

- Tamper indicating - designed to provide a VOID message in the facestock when removal is attempted.
- The matt topcoat is designed for thermal transfer printing, and also provides improved ink anchorage for traditional forms of press printing.
- Permanent acrylic adhesive, formulated with high tack and high ultimate adhesion to a variety of surfaces.
- The compact format of the “VOID” text permits manufacture of small labels
- Durable polyester facestock for harsh environments
- 90g/m2 Glassine liner for consistent die cutting.

Application Ideas

- Tamper indicating seal or label for types of varnish coated carton board packaging.
- Non transferable labels for automotive, appliance and electronics industries
- Tamper indicating labels and seals for medical and pharmaceutical industries

Performance Characteristics

Not for specification purposes

Adhesive Performance	When used at standard conditions of 23ºC and 50% Relative Humidity, the material is suitable for application to a variety of clean* surfaces, e.g. Stainless Steel Aluminium Polyester Powder Coated Metal Acrylic Painted Metal ABS Polycarbonate Polystyrene Phenolic Polypropylene Glass

Environmental Performance	Performance of label applied to stainless steel. Other substrates should be tested as per application Minimum application temperature +5ºC

Processing

Printing:
Facestock is topcoated for improved ink receptivity and is designed for thermal transfer printing. Resin ribbons are recommended for optimum durability. It is printable by standard roll processing methods including flexography, hot stamp, letterpress, and screen printing. The compatibility of ink systems and printing methods should be verified by testing in the actual process.

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.

Care should be taken not to disturb the tamper indicating feature by pre-destructing the void pattern when manually removing the label from the liner. Slowly remove the liner from the label at a 90º angle.

The tamper indicating mechanism (i.e. the checkerboard pattern) depends upon adequate adhesion of the label to the substrate. A sufficient bond may not develop on all surfaces due to low surface energy or contaminated surfaces (mold release). The length of dwell time on the surface and the environmental conditions should also be considered. Therefore, it is important to determine the suitability of the material in the intended application by carefully pre-testing before the application process has begun.

The primary function of the material is to affect a non-transferable (non-reusable) label or seal by causing the checkerboard pattern to appear on the facestock surface when removal is attempted.

As a result of the primary function described above the checkerboard pattern may also be transferred to the application surface. This message is a secondary rather than a permanent indication of tampering since the pattern transferred to the application surface can be removed by rubbing or by solvent wiping.

Caution should be exercised to avoid covering the surface of the label with opaque graphics to the extent that the security pattern is hidden by the graphics and the effectiveness of the label or seal is lessened.

Since no tamper-indicating feature is 100% tamper proof, careful consideration must be taken when designing labels and seals. When the consequences of tampering could be severe, additional methods should be considered in combination with the labels so that the tamper indicating features are appropriate to the requirements of the application.

Storage	Store at standard room temperature conditions of 21ºC and 50% relative humidity.
Shelf Life	24 months from date of dispatch by 3M when stored in the original packaging at 21℃ & 50 % relative humidity
For Additional Information	To request additional product information or to arrange for sales assistance, call…… Address correspondence to: 3M
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Values presented have been determined by standard test methods and are average values not to be used for specification purposes.
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