Laser Toner Printable Label Material

7841

Technical Data **May, 2002**

Product Description

3M™ Label Material 7841 with 3M™ Adhesive 310 is designed for continuous laser printing offering good print contrast when bar coding and excellent toner anchorage. The Adhesive 310 resists oozing and is designed to function in a variety of printers using a broad range of label configurations. Label Material 7841 is also compatible with the Indigo™ Omnius™ One-Shot Color™ Press.

Construction

Facestock	Adhesive	Liner
7.0 mil (178 microns) matte white Teslin™	0.8 mil (20 microns) 310 acrylic	3.2 mil (81 microns) 55# densified kraft

Typical Physical Properties and Performance Characteristics

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

Conformability	Conforms to extremely small diameters such as wires when wrapped onto itself. Some conformability to compound curved surfaces.
Printing	Flexographic and continuous laser printing using QMS CF 2215™ or Diagraph Predator™.
Indigo Digital Offset Printing	Recommend print blanket temperature of 284-293°F (140-145°C) – specific conditions may vary from press-to-press. Typically a lower blanket temperature improves resolution while a higher blanket temperature improves ink adhesion/durability.
Temperature Range	-40°F (-40°C) to 250°F (121°C)
Minimum Application Temperature	50°F (10°C)
Die-Cutting	Rotary or flatbed. Use sharp rotary dies tooled for specific label stock. Do not cut into liner too deeply – avoid stacking fan-folded labels higher than 3" - 4".
Dispensing	Suitable for manual applications.

3M™ Laser Toner Printable Label Material
7841

Adhesion

Note: Peel test procedure is ASTM D-3330

Surface	Initial (10 Minute Dwell/RT) 180° Peel oz/in	Initial (10 Minute Dwell/RT) 180° Peel N/100 mm	Conditioned for 3 Days at Room Temperature 72°F (22°C) 180° Peel oz/in	Conditioned for 3 Days at Room Temperature 72°F (22°C) 180° Peel N/100 mm
Stainless Steel	32	35	42	46
Polycarbonate	36	39	43	48
Polypropylene	23	25	30	33

Liner Release

Note: 180° peel of liner from facestock

90"/minute grams/1" width
8

Environmental Performance

Samples were applied to stainless steel panels and allowed to dwell for 24 hours prior to exposures.

Liquid	Dwell Time/Exposure Condition	Results
Engine Oil (10W30) @ 250°F (121°C)	4 hours	Discolors brown – 3mm edge penetration
Acid (pH 4) @ Room Temperature	4 hours	No change
Base (pH 10) @ Room Temperature	4 hours	No change
Isopropyl Alcohol @ Room Temperature	4 hours	Label removed during exposure
Water @ Room Temperature	24 hours	No visual change – 1mm edge penetration

Temperature Resistance:

300°F (149°C) for 1 day:	no change
-40°F (-40°C) for 1 day	no change

NOTE: Extended exposure to high temperature will result in discoloration.

Humidity Resistance:

1 day at 90°F (32°C) and 90% relative humidity:	no visual change – 1mm edge penetration

3M™ Laser Toner Printable Label Material
7841

Application Ideas

- Alphanumeric and bar coding
- Environments requiring higher performance than paper label stocks
- Inventory, bin and in-process item labeling
- Property identification
- Durable goods labeling
- Wire Marking

Application Techniques

Extreme heat and pressure used in the toner fusing section of some laser printers may cause curl in the printed label material.

Shelf Life

Two years from date of manufacture of product when properly stored at 72°F (22°C) and 50% relative humidity.

Agency Approvals

UL Recognized, File MH11410 (www.ul.com under certifications)

CSA: Accepted, File 099316 (http://directories.csa-international.org)

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-223-7427 or visit www.3M.com/converter. Address correspondence to: 3M Engineered Adhesives Division, 3M Center, Building 220-7E-01, St. Paul, MN 55144-1000. Our fax number is 651-733-9175. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

Important Notice

3M MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M product. Given the variety of factors that can affect the use and performance of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

Limitation of Remedies and Liability

If the 3M product is proved to be defective, THE EXCLUSIVE REMEDY, AT 3M'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OF OR TO REPAIR OR REPLACE THE DEFECTIVE 3M PRODUCT. 3M shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including, but not limited to, contract, negligence, warranty, or strict liability.

ISO 9002

This Engineered Adhesives Division product was manufactured under a 3M quality system registered to ISO 9002 standards.

3M

Converter Markets
Engineered Adhesives Division
3M Center, Building 551-1W-02
St. Paul, MN 55144-1000

Recycled Paper
40% pre-consumer
10% post-consumer

Printed in U.S.A.

 70-0706-0485-8 (5/02)