Thermal Transfer Polyester Label Material with Adhesive 550

5771 • 5771FL • 5771NF

Technical Data **January, 2004**

Product Description

3M™ Thermal Transfer Polyester Label Materials 5771, 5771FL and 5771NF with 3M™ Adhesive 550 provides stable adhesion that builds moderately without degrading over time and provides excellent adhesion for attachment to a wide variety of surfaces.

Construction

(Calipers are nominal values.)

Product	Facestock	Adhesive	Liner
3M label material 5771	2.0 mil (58 micron) Gloss white polyester	0.8 mil (20 micron) 550 High Stability Acrylic	3.2 mil (81 micron) 55# Super calendared kraft – Easy-release
3M label material 5771FL	2.0 mil (51 micron) Gloss white polyester	0.8 mil (20 micron) 550 High Stability Acrylic	2.0 mil (51 micron) Polyester film
3M label material 5771NF	2.0 mil (51 micron) Gloss white polyester	0.8 mil (20 micron) 550 High Stability Acrylic	1.9 mil (48 micron) PET Non-silicone

Features

- Labels remove cleanly and in one piece from most metal and high energy plastics.
- Facestock is topcoated for thermal transfer printing, and is also suitable for press printing.
- UL recognized (File MH16411) and CSA accepted (File 99316).

Application Ideas

- Identification of hard disk drive and its components.
- Bar Code labels and rating plates.
- Property identification and asset labeling.
- Warning, instruction, and service labels for durable goods.
- Nameplates for durable goods.

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Typical Physical Properties

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

Adhesion: 180° peel, test procedure is ASTM D 3330.

		Initial (20 Minute Dwell/RT) 180° peel	Conditioned for 3 Days at RT 72°F (22°C) 180° peel	Conditioned for 3 Days at 120°F (48°C) 180° peel	Conditioned for 3 Days at 90°F (32°C) and 90% RH 180° peel
3M™ Adhesive	**Surface**	**Oz./In.**	**Oz./In.**	**Oz./In.**	**Oz./In.**
550	Stainless Steel	29	44	60	36
550	Aluminum	30	37	43	36
550	Glass	30	29	36	31
550	Polycarbonate	34	53	42	52

Removability: Visual Inspection

All of the samples used to generate the adhesion values above showed no evidence of adhesive transfer to the test surface.

Liner Release: 180° Removal of Liner from Facestock.

Product	Rate of Removal	Gram/Inch Width	N/100 mm
3M™ Thermal Transfer Polyester Label Material 5771	90 inches/minute	8	9
3M™ Thermal Transfer Polyester Label Material 5771FL	90 inches/minute	9	10
3M™ Thermal Transfer Polyester Label Material 5771NF	90 inches/minute	8	9

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Environmental Performance

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

The properties defined are based on four hour immersions at room temperature (72°F/22°C) unless otherwise noted. Samples were applied to stainless steel panels 24 hours prior to immersion and were evaluated one hour after removal from the solution for peel adhesion.

Chemical Resistance:

Chemical	Appearance
Isopropyl Alcohol*	No change
Detergent (1% ALCONOX®*)	No change
Engine Oil (10W30) @ 250°F (121°C)	No change
Water for 48 hours	Slightly cloudy

Temperature Resistance:

250°F (121°C) for 72 hours:	No change

***Note:** When using solvents, read and follow the manufacturer's precautions and directions for use.

Processing

Printing:
Facestock is topcoated for improved ink receptivity and is designed for thermal transfer printing. It is printable by all standard roll processing methods including flexography, hot stamp, letterpress, and screen printing. Refer to the Graphic Ink Selection Guide or call 3M Customer Service at 1-800-223-7427 for additional information.

Die Cutting:
Rotary die cutting is recommended.

Packaging:
Finished labels should be stored in plastic bags.

Application Techniques

For maximum bond strength, the surface should be clean and dry. Typical cleaning solvents are heptane and isopropyl alcohol.*

***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 50°F (10°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.

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Storage

Store at room temperature conditions of 72°F (22°C) and 50% relative humidity.

Shelf Life

If stored under proper conditions, product retains its performance and properties for two years from date of manufacture.

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 Industrial Adhesives and Tapes Division, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55144-1000. Our fax number is 651-778-4244. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

Product Use

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors 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.

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ISO 9001

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

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Converter Markets
Industrial Adhesives and Tapes Division

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40% pre-consumer
10% post-consumer

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