

# 3M™ Low Outgassing Removable Label Material 5770 and 5770NF with 3M™ Adhesive 550

## Product Description

3M™ Low Outgassing Removable Label Material 5770 and 5770NF 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.

## Product Construction

(Calipers are nominal values.)

Product	Facestock	Adhesive	Liner
3M Label Material 5770	2.3 mils (58 microns) Matte white polyester	0.8 mil (20 microns) 550 High Stability Acrylic	3.2 mils (81 microns) 55# Super calendared kraft – Easy-release
3M Label Material 5770NF	2.3 mils (58 microns) Matte white polyester	0.8 mil (20 microns) 550 High Stability Acrylic	1.9 mils (48 microns) 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.

\*Before using this product for a specific application, you must evaluate it and determine if it is suitable for your application.



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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.

Product	Surface	Initial (20 Minute Dwell/RT)		72 Hours at RT 72°F (22°C)		72 Hours at 90°F (32°C) and 90% RH	
		Oz./In.	N/100mm	Oz./In.	N/100mm	Oz./In.	N/100mm
3M™ Low Outgassing Removable Label Material							
3M Label Material 5770	Stainless Steel	26	28	33	36	41	45
3M Label Material 5770NF	Stainless Steel	21	23	36	39	34	37

**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	72 Hours at RT 72°F (22°C)	72 Hours at 90°F (32°C) and 90% RH
		g/in.	g/in.
3M™ Low Outgassing Removable Label Material			
3M Label Material 5770	90 inches/minute	5.2	7.4
3M Label Material 5770NF	91 inches/minute	6	7.3

### Shear Adhesion:

ASTM D-3657 / TM-107

1/2" x 1" overlap, minutes to failure.

	3M™ Low Outgassing Removable Label Material 5770	3M™ Low Outgassing Removable Label Material 5770NF
Room Temperature 1000 grams, stainless steel	>10,000	>10,000

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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
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\***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.

## 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.

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## Certification/Recognition

**MSDS:** 3M has not prepared a MSDS for this product which is not subject to the MSDS requirements of the Occupational Safety and Health Administration's Hazard Communication Standard, 29 C.F.R. 1910.1200(b)(6)(v). When used under reasonable conditions or in accordance with the 3M directions for use, the product should not present a health and safety hazard. However, use or processing of the product in a manner not in accordance with the directions for use may affect its performance and present potential health and safety hazards.

**TSCA:** This product is defined as an article under the Toxic Substances Control Act and therefore, it is exempt from inventory listing requirements.

**RoHs Complaint/REACH Compliant:** This product complies with the European Union's "Restriction of Hazardous Substances" (RoHs) initiative and with European REACH regulations 2002/95/EC and 2005/618/EC.

## For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-251-8634. Address correspondence to: 3M, Electronics Markets Materials Division, 3M Center, Building 225-3S-06, St. Paul, MN 55144-1000. Our fax number is 651-778-4244 or 1-877-369-2923. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

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