

## <u>3M</u>

# Adhesive Transfer Tape with Quick Bonding Adhesive 360

9626 • 9627

Technical Data	November, 2009
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#### **Product Description**

3M<sup>TM</sup> Adhesive Transfer Tapes with 3M<sup>TM</sup> Quick Bonding Adhesive 360 provides high bond strength to most surfaces, including many low surface energy plastics such as polypropylene and powder coated paints.

Construction	Product Number	Adhesive Type/ Thickness	Liner Color, Type, Print	Liner Caliper
	3M™ Adhesive	0.002"	Natural, 60#	0.0032"
	Transfer Tape 9626	(0.05 mm)	Glassine	(0.08 mm)
	3M™ Adhesive	0.005"	Natural, 60#	0.0032"
	Transfer Tape 9627	(0.13 mm)	Glassine	(0.08 mm)

**Note:** The caliper listed is based on a calculation from manufacturing controlled adhesive coat weights using a density of 1.071 g/cc.

## $3M^{\text{\tiny TM}}$ Adhesive Transfer Tape with Quick Bonding Adhesive 360

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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.

Product Number	0.05 mm (2.0 mil) 3M™ Adhesive Transfer Tape 9626	0.13 mm (5.0 mil) 3M™ Adhesive Transfer Tape 9627
Adhesion to Polypropylene ASTM D3330 – 180 degree 2 mil al foil	Oz/in (N/25 mm) Faceside / Backside	Oz/in (N/25 mm) Faceside / Backside
- 30 seconds RT	100 (28) / 100 (28)	160 (45) / 150 (42)
- 15 minutes RT	100 (28) / 100 (28)	165 (46) / 155 (43)
- 72 hours RT	130 (36) / 120 (34)	165 (46) / 165 (46)
Adhesion to other surfaces ASTM D3330 – 180 degree, 2 mil al foil, 72 hour RT	Oz/in (N/25 mm) Faceside / Backside	Oz/in (N/25 mm) Faceside / Backside
ABS	140 (39) / 130 (36)	165 (46) / 165 (46)
Stainless Steel	140 (39) / 140 (39)	160 (45) / 160 (45)
Polycarbonate	140 (39) / 140 (39)	165 (46) / 165 (46)
LDPE	60 (17) / 55 (15)	95 (26) / 90 (25)
HDPE	70 (20) / 65 (18)	80 (22) / 80 (22)
Shear Strength - ASTM D3654 Modified - (.5 inch² sample size)		
1000 grams at 72°F (22°C)	>10,000 minutes	>10,000 minutes
500 grams at 158°F (70°F)	>10,000 minutes	>10,000 minutes
Relative High Temperature Operating Ranges:		
Long Term (days, weeks)	200°F (93°C)	200°F (93°C)
Short Term (minutes, hours)	350°F (177°C)	350°F (177°C)
Relative Solvent Resistance:	Very Good	Very Good

#### **Available Sizes**

Roll length, width, slitting tolerance, core size.

Product	3M™ Adhesive Transfer Tape		
	9626	9627	
Maximum Length in.:			
1/2" to 1/2"	72 yds. (66 m)	72 yds. (66 m)	
1/2" to 1"	360 yds. (329 m)	252 yds. (230 m)	
1" to 6"	540 yds. (494 m)	540 yds. (494 m	
6" to 27"	900 yds. (823 m)	720 yds. (658 m)	
27" to 54"	540 yds. (494 m)	540 yds. (494 m)	
Normal Slitting Tolerance	± 1/32 in. (0.08 mm)		
Core Size (ID)	3.0 in. (76.2 mm)		
Minimum length	72 yds. (66 m).		
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### 3M<sup>™</sup> Adhesive Transfer Tape with Quick Bonding Adhesive 360

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#### **Features**

- Excellent adhesion to difficult to bond to surfaces such as HDPE, LDPE, and PP.
- Super quick stick.
- Higher adhesion from a thinner tape.
- Excellent solvent resistance.
- High temperature performance.

## **Application Techniques**

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application will assist the adhesive in developing intimate contact with the bonding surface. To accelerate the adhesion process, additional heat, up to  $130^{\circ}F$  ( $54^{\circ}C$ ), may be used.

To obtain optimum adhesion, the bonding surfaces must be clean, dry, and well unified. Some typical surface cleaning solvents are isopropyl alcohol or heptane.\*

Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C). Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

\*When using solvents, extinguish all ignition sources, including pilot lights, and follow the manufacturers precautions and directions for use. These cleaning recommendations may not be compliant with the rules of certain Air Quality Management Districts in California; consult applicable rules before use.

## **Environmental Performance**

**Humidity Resistance:** High humidity has minimal effect on adhesive performance. No significant reduction in bond strength is observed after exposure for 7 days at 90°F (32°C) and 90% relative humidity.

**UV Resistance:** When properly applied, nameplates and decorative trim parts are not adversely affected by exposure.

**Water Resistance:** Immersion in water has no appreciable effect on the bond strength. After 100 hours at room temperature, the high bond strength is maintained.

**Temperature Cycling Resistance:** High bond strength is maintained after cycling four times through:

8 hours at 194°F (90°C)

16 hours at  $-40^{\circ}$ F ( $-40^{\circ}$ C)

8 hours at 100.4°F (38°C/100% RH)

16 hours at -40°F (-40°C)

**Chemical Resistance:** When properly applied, nameplate and decorative trim parts will hold securely after exposure to numerous chemicals including oil, mild acids, and alkalis.

#### **Application Ideas**

- Foam to powder coated painted surfaces.
- Low surface energy plastic adhesion.

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#### **Application Equipment**

To apply adhesives in a wide web format, lamination equipment is required to ensure acceptable quality. To learn more about working with pressure-sensitive adhesives please refer to technical bulletin,  $3M^{TM}$  Lamination Techniques for Converters of Laminating Adhesives (70-0704-1430-8).

For additional dispenser information, contact your local 3M sales representative, or the toll free 3M sales assistance number at 1-800-362-3550.

#### **Storage**

Store in original cartons at 70°F (21°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.

#### **Technical Information**

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

#### **Product Use**

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

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Industrial Adhesives and Tapes Division Converter Markets

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