



# Adhesive Transfer Tape with 3M Adhesive 400

## 463 • 465 • 9457 • 9665

Technical Data

May, 2003

**Product Description** 3M™ Adhesive Transfer Tapes 463, 465, 9457 and 9665 with 3M™ Adhesive 400 are ideal for bonding together a wide variety of similar and dissimilar materials such as metals, glass, wood, papers, paints, and many plastics.

Construction	Products	3M Tape 463	3M Tape 465	3M Tape 9457	3M Tape 9665
Adhesive Type:		400*	400*	400*	400*
Adhesive Carrier:		None	None	None	None
Release Liner:		60# Unbleached Densified Kraft	60# Unbleached Densified Kraft	55# Densified Kraft	58# Polycoated Kraft
Approximate Thickness:					
Release Liner		0.004 in. (0.10 mm)	0.004 in. (0.10 mm)	0.0032 in. (0.08 mm)	0.065 in. (0.165 mm)
Tape only		0.002 in. (0.05 mm)	0.002 in. (0.05 mm)	0.001 in. (0.025 mm)	0.002 in. (0.05 mm)
Tape Color:		Clear	Clear	Clear	Clear

\*3M™ Adhesive 400 is a medium-firm acrylic pressure-sensitive adhesive system with an excellent balance of high initial adhesion (quick stick) and good shear holding power.

### 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.**

Adhesion to Steel: (ASTM D-3330)	25 oz./in. width (27 N/100 mm)	25 oz./in. width (27 N/100 mm)	25 oz./in. width (27 N/100 mm)	25 oz./in. width (27 N/100 mm)
Relative High Temperature Operating Ranges:				
Short Term (minutes, hours)	250°F (121°C)	250°F (121°C)	250°F (121°C)	250°F (121°C)
Long Term (Days, Weeks)	180°F (82°C)	180°F (82°C)	180°F (82°C)	180°F (82°C)
Relative Solvent Resistance:	Good	Good	Good	Good
U.V. Resistance:	Excellent	Excellent	Excellent	Excellent

### Available Sizes

Available Lengths (Subject to Minimum Order Requirements):				
Standard	60 yds. (54.9 m)	60 yds. (54.9 m)	60 yds. (54.9 m)	60 yds. (54.9 m)
Maximum In:				
1/8" to 3/8" widths	120 yds. (110 m)	60 yds. (54.9 m)	60 yds. (54.9 m)	60 yds. (54.9 m)
3/8" to 1/2" widths	120 yds. (110 m)	60 yds. (54.9 m)	180 yds. (165 m)	60 yds. (54.9 m)
1/2" to 2" widths	600 yds. (549 m)	360 yds. (329 m)	360 yds. (329 m)	360 yds. (329 m)
2" and greater	360 yds. (329 m)	360 yds. (329 m)	360 yds. (329 m)	360 yds. (329 m)
Available Widths (Subject to Minimum Order Requirements):				
Minimum	1/8 in. (3.18 mm)	1/8 in. (3.18 mm)	1/2 in. (12.7 mm)	1/8 in. (3.18 mm)
Maximum	48 in. (1219 mm)	48 in. (1219 mm)	54 in. (1372 mm)	48 in. (1219 mm)
Normal Slitting Tolerance:	± 1/32 in. (0.8 mm)	± 1/32 in. (0.8 mm)	± 1/32 in. (0.8 mm)	± 1/32 in. (0.8 mm)
Core Size (ID):	3.0 in. (76.2 mm)	3.0 in. (76.2 mm)	3.0 in. (76.2 mm)	3.0 in. (76.2 mm)

For any other than standard widths or lengths contact your 3M Rep.

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## Application Techniques

- Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and improve bond strength.
- To obtain optimum adhesion, the bonding surfaces must be clean, dry, and well unified. Some typical surface cleaning solvents are isopropyl alcohol or heptane.\*  
\*Be sure to follow manufacturer's safety precautions and directions for use when using solvents.
- 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.

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## Features

- Tapes meet the requirements of U.S. Government specification MIL-P-19834B, Type I.
- 3M™ Adhesive Transfer Tape 463 is designed for use with 3M automatic dispensing equipment.
- 3M™ Adhesive Transfer Tape 465 is designed for use with easy liner release for manual or hand application.
- 3M™ Adhesive Transfer Tape 9457 is designed for use with sub-surface graphics printing on polyester films and custom tamper-indicating labels.
- 3M™ Adhesive Transfer Tape 9665 is the same as 3M tape 465 but has a thicker liner for moisture stability with kiss-cutting applications.

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## Application Ideas

- High-speed flying splices on most grades of paper.
- Splicing of foils, films, fabrics.
- Laminating adhesive for foams, photos.
- Attaching metal or plastic nameplates.
- Mounting promotional items, posters.
- Core starting.

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## Storage

Store under normal conditions of 70°F (21°C) and 50% relative humidity.

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## Shelf Life

To obtain best performance, use product within two years from date of manufacture.

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## For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550 or visit [www.3M.com/adhesives](http://www.3M.com/adhesives). 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.

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



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Printed in U.S.A.  
©3M 2003 70-0709-3844-7 (5/03)