

December, 2017

## 3M™ Adhesive Transfer Tape 9457

### Product Description

3M™ Adhesive Transfer Tapes 463, 465, 9457, 9665 are made with 3M™ Acrylic Adhesive 400 and are ideal for bonding together a wide variety of surfaces, including paper, cardboard, metals, glass, and HSE (high surface energy) plastics. This pressure sensitive acrylic adhesive family features excellent initial adhesion to HSE materials with good holding power at lower temperatures. 3M™ Adhesive Transfer Tapes 463, 465 and 9665 contain discrete glass fibers to aid in processing and handling of the product, 3M™ Adhesive Transfer Tape 9457 does not contain fibers.

This adhesive family offers constructions available in 1 mil and 2 mil thicknesses and provide a variety of liner configurations to help ensure optimum process flexibility.

### Product Features

- Tapes meet the requirements of U.S. Government specification MIL-P-19834B, Type I.
- 3M™ Adhesive Transfer Tape 9457 is designed for use with sub-surface graphics printing on polyester films and custom tamper-indicating labels.



**Technical Information Note**

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

**Typical Physical Properties**

| Property           | Values              |         | Notes   |
|--------------------|---------------------|---------|---|
| Adhesive Thickness | 0.025 mm            | 1.0 mil | The thickness listed is based on a calculation from manufacturing controlled adhesive coat weights using a density of 1.012 g/cc. While past data pages have listed nominal thicknesses, the coat weight (and theoretical caliper) has not changed. |
| Liner              | 55# Densified Kraft |         |   |
| Liner Thickness    | 0.08 mm             | 3.2 mil | The thickness listed is based on a calculation from manufacturing controlled adhesive coat weights using a density of 1.012 g/cc. While past data pages have listed nominal thicknesses, the coat weight (and theoretical caliper) has not changed. |
| Liner Color        | White, No Print     |         |   |

**Typical Performance Characteristics**

| 90° Peel Adhesion |          | Dwell/Cure Time           |
|-------------------|----------|---------------------------|
| 1.6 N/cm          | 15 oz/in | 15 min @ Room Temperature |
| 2.7 N/cm          | 25 oz/in | 72 hr @ Room Temperature  |

Property: 90° Peel Adhesion  
 Method: ASTM D3330  
 Substrate: Stainless Steel  
 Backing: Aluminum Foil

**Available Sizes**

| Property     | Values  |       | Notes   |
|--------------|---------|-------|---|
| Master Width | 1372 mm | 54 in | More sizes may be available. Please call 800-362-3550 or talk to your local 3M representative for more information. |

# 3M™ Adhesive Transfer Tape 9457

## Environmental Performance

**Humidity Resistance:** High humidity has a minimal effect on adhesive performance. Bond strength (is generally higher/shows no significant reduction) 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 outdoor exposure.

**Water Resistance:** Immersion in water has no appreciable effect on the bond strength.

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

**Bond Build-up:** The bond strength of 3M™ Adhesive 400 increases as a function of time and temperature

**Temperature/Heat Resistance:** Adhesive 400 is usable for short periods (minutes, hours) at temperatures up to 250°F (120°C) and for intermittent longer periods (days, weeks) up to 150°F (65°C).

**Lower Temperature Service Limit:** -60F (-50°C).

## Handling/Application Information

### 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.

### 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

## Storage and Shelf Life

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

To obtain best performance, use product within 24 months from date of manufacture.

## Industry Specifications

MIL-P-19834B, Type I

## Trademarks

3M is a trademark of 3M Company.

## References

| Property                | Values  |
|-------------------------|---|
| 3m.com Product Page     | <a href="https://www.3m.com/3M/en_US/company-us/all-3m-products/-/3M-Adhesive-Transfer-Tape-9457?N=5002385+3293241373&amp;rt=rud">https://www.3m.com/3M/en_US/company-us/all-3m-products/-/3M-Adhesive-Transfer-Tape-9457?N=5002385+3293241373&amp;rt=rud</a> |
| Safety Data Sheet (SDS) | <a href="https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=9457">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=9457</a> |

# 3M™ Adhesive Transfer Tape 9457

## Family Group

|                         | 463                 | 465                 | 9457                | 9665                 |
|-------------------------|---------------------|---------------------|---------------------|----------------------|
| Adhesive Thickness (mm) | 0.05                | 0.05                | 0.025               | 0.05                 |
| Liner                   | 60# Densified Kraft | 60# Densified Kraft | 55# Densified Kraft | 60# Polycoated Kraft |
| Liner Thickness (mm)    | 0.09                | 0.09                | 0.08                | 0.11                 |
| Liner Color             | Tan, No Print       | Tan, No Print       | White, No Print     | Tan, No Print        |

## ISO Statement

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

## 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

## Recognition/Certification

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

SDS: 3M has not prepared a SDS for this product which is not subjected to the SDS 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, this 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.

UL: These products have been recognized by Underwriters Laboratories, Inc. under UL 969, Marking and Labeling Systems Materials Component. For more information on the UL Certification, please visit the website at <http://www.3M.com/converter>, select UL Recognized Materials, then select the specific product area.

Military: Meets Mil-P 19834B Type 1.

Note: One of 3M's core values is to respect our social and physical environment. 3M is committed to comply with ever-changing, global, regulatory and consumer environmental, health, and safety (EHS) requirements. As a service to our customers, 3M is providing information on the regulatory status of many 3M products. Further regulation information including that for OSHA, USCPIS, FDA, California Proposition 65, READY and RoHS, can be found at [3M.com/regs](http://3M.com/regs).

## Information

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