



Technical Data Sheet

3M™ Adhesive Transfer Tape 9457



[Product Details](#)



[Regulatory Info/SDS](#)

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

| Attribute Name | Test Method | Value |
|----------------------|-------------|---------------------|
| Adhesive Type | | Acrylic |
| Total Tape Thickness | ASTM D3652 | 0.025 mm (1 mil) |
| Liner | | 55# Densified Kraft |
| Liner Thickness | | 0.08 mm (3.2 mil) |
| Primary Liner Color | | White, No Print |

Typical Performance Characteristics

90° Peel Adhesion

Substrate: Stainless Steel
Temperature: 22 °C (72 °F)
Backing: 2 mil Aluminum Foil
Test Method: ASTM D3330

| Dwell Time | Value |
|------------|----------------------------------|
| 15 min | 1.6 N/cm (15 oz/in) ¹ |
| 72 h | 2.7 N/cm (25 oz/in) ¹ |

¹ 12 in/min (300 mm/min)

| Attribute Name | Value |
|-----------------------------------|------------------------------|
| Short Term Temperature Resistance | 121 °C (250 °F) ¹ |
| Long Term Temperature Resistance | 82 °C (180 °F) ² |

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

Typical Environmental Characteristics

Environmental Resistance

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 Examples

- 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

Industry Specifications

MIL-P-19834B, Type I

FDA Statement

This product might be suitable for use in indirect food contact applications. Please see the applicable Regulatory Data Sheet for more information relating to FDA compliance.

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.

Available Sizes

| Attribute Name | Value |
|-----------------------|------------------------------|
| Master Width | 1372 mm (54 in) ¹ |

¹ More sizes may be available. Please talk to your local 3M representative for more information.

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, USCPSP, FDA, California Proposition 65, REACH and RoHS, can be found at 3M.com/regs.

Automotive Disclaimer

Select Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

Information

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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. 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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