

# **Technical Data Sheet**

3M<sup>™</sup> Adhesive Transfer Tape 465

# Product Description

3M<sup>™</sup> Adhesive Transfer Tapes 463, 465 & 9457 are made with 3M<sup>™</sup> 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<sup>™</sup> Adhesive Transfer Tapes 463 and 465 contain discrete glass fibers to aid in processing and handling of the product, 3M<sup>™</sup> 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

• 3M<sup>™</sup> Adhesive Transfer Tape 465 is designed for use with easy liner release for manual or hand application.

# **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		400 Fibered Acrylic
Total Tape Thickness	ASTM D3652	0.05 mm
Liner		60# Densified Kraft
Liner Thickness		0.09 mm
Primary Liner Color		Tan

# **Typical Performance Characteristics**

# 90° Peel Adhesion

Substrate: Stainless Steel Backing: 2 mil Aluminum Foil Test Method: ASTM D3330

Dwell Time	Temperature	Value
15 min	23 °C	1.6 N/cm <sup>1</sup>
72 h	22 °C	2.7 N/cm <sup>2</sup>

<sup>1</sup> 304 mm/min (12 in/min)

<sup>2</sup> 12 in/min (300 mm/min)

# **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<sup>™</sup> 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**

# **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 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging. out of direct sunlight. For best performance, use this product within 24 months from date of manufacture.

## **Available Sizes**

Attribute Name	Value
Master Width	1219 mm <sup>1</sup>

<sup>1</sup> 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.

**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, USCPSI, FDA, California Proposition 65, READY 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**

Precautionary Information: Refer to product label and Material Safety Data Sheet for health and safety information before using the product. For information, please contact your local 3M Office. You can click or scan QR code to see contact detail or visit www.3M.com Important Information. 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 or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law. Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.

# ISO Statement

This 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, please contact your local 3M office.

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