English-EU

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Technical Data Sheet

3M™ Adhesive Transfer Tape 9485PC

Product Description

Finite Element Analysis (FEA)data is available for this product at: **3m.com/FEA**

This 3M™ Adhesive Transfer Tape with 3M™ Adhesive 350 is a modified acrylic adhesive ideal for very high-bond strength to many surfaces. It has excellent chemical resistance and bold strength even at elevated temperatures. This tape is offered with a fiber reinforced adhesive which is important for roll stability in narrow widths. Tapes using adhesive 350 are designed for temperature exposure to 450°F (232°C) for short periods of time and up to 300°F (149°C) over long time frames. This adhesive is a good choice for applications which require adhesion to Low Surface Energy plastics, powder coatings and oily metals.

Product Features

• Bonding to low surface energy substrates and powder coated paints • 58 lb. PCK (polycoated kraft) paper liner provides moisture resistance and minimizes wrinkles • Designed for chemical resistance and shear and peel strength even at elevated temperatures • Adhesive is fiber reinforced for roll stability in narrow widths and to resist oozing • Low odor for improved working environment

General Information

• Excellent bond to metal and high surface energy plastics.
• Outstanding temperature and chemical resistance.
• Two adhesive thicknesses: 2 mil for thin profile labels and 5 mil for rougher surfaces.
• Available on various liners for specialized processing:
- 55# Densified Kraft for rotary die-cutting
- 62# Polycoated Kraft for steel rule die-cutting
- 83# Polycoated Kraft for lay flat applications
- 78# Extensible Kraft for conformable applications

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	Value
Dispenser Selection	For assistance in helping you determine the best dispenser for your application, contact your local 3M sales representative, or the toll free 3M sales assistance number at 1-800-362-3550.

Attribute Name	Test Method	Value
Adhesive Type		350 Fibered Acrylic
Total Tape Thickness	ASTM D3652	0.127 mm
Liner		62# Polycoated Kraft
Liner Thickness		0.11 mm
Primary Liner Color		Tan

Typical Performance Characteristics

180° Peel Adhesion

Temperature: 23 °C
Dwell Time: 72 h
Test Method: ASTM D3330

Substrate	Value
ABS	9.3 N/cm [1]
Acrylic (PMMA)	13.6 N/cm [1]
Aluminum	10 N/cm [1]
Epoxy	13.1 N/cm [1]
Glass	15.8 N/cm [1]
High Density Polyethylene (HDPE)	3.8 N/cm [1]
Low Density Polyethylene (LDPE)	4.4 N/cm [1]
Painted Metal	15.8 N/cm [1]
Polycarbonate (PC)	15.8 N/cm [1]
Polypropylene (PP)	8.7 N/cm [1]
Polyvinyl chloride (PVC)	9.8 N/cm [1]
Stainless Steel	16.4 N/cm [1]

[1] 304 mm/min (12 in/min)

Temperature: 23 °C

Attribute Name	Value
Liner Release	44 g/in

Static Shear

Temperature	Test Condition	Value
23 °C	1000 g	10,000 min [1]
70 °C	500 g	10,000 min [1]
93 °C	400 g	10,000 min [1]
121 °C	300 g	10,000 min [1]
149 °C	300 g	10,000 min [1]
177 °C	300 g	10,000 min [1]
232 °C	200 g	10,000 min [1]

[1] 25 x 25 mm (1 in x 1 in) sample area, test terminated after 10,000 minutes

Attribute Name	Value
Short Term Temperature Resistance	232 °C [1]
Long Term Temperature Resistance	121 °C [2]
Minimum Long Term Temperature Resistance	-40 °C [2]

[1] Short Term (minutes, hour)

[2] Long Term (day, weeks)

Handling/Application Information

Application Examples

Ideal adhesive application temperature range is 70°F to 100°F (21°C to 38°C). Initial application to surfaces at temperatures below 50°F (10°C) is not recommended for most pressure sensitive adhesives because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is satisfactory. For more specific information, contact your local 3M office.
2 mil thick tapes may generally be used for joining materials that are relatively smooth, thin and have low residual stress. For materials with a rough or textured surface, the thicker adhesive film of the 5 mil tapes would be more appropriate for evaluation.

Application Techniques

For maximum bond strength the surface should be thoroughly cleaned and dried. Typical cleaning solvents are heptane or isopropyl alcohol. Consult manufacturer's Material Safety Data Sheet for proper handling and storage instructions. Bond strength can also be improved with firm application pressure and moderate heat (for metal surfaces only), from 100°F (38°C) to 130°F (54°C), causing the adhesive to develop intimate contact with the bonding surfaces.

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in a sealed plastic bag, out of direct sunlight. For best performance, use this product within 24 months from date of manufacture.

Available Sizes

Attribute Name	Width	Value
Core Size (ID)		76.2 mm
Maximum Available Width		48 in
Maximum Length	1/8 in to 3/8 in width	54.9 m
Maximum Length	3/8 in to 1/2 in width	165 m
Maximum Length	1/2 in to 1 in widths	329 m
Maximum Length	1 in to maximum	329 m
Normal Slitting Tolerance		± 0.8 mm
Note		Subject to Minimum Order Requirements
Standard Roll Length		60 yd

Recognition/Certification

MSDS:3M has not prepared a MSDS for these products which are not subject to the MSDS 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, these products should not present a health and safety hazard. However, use or processing of these products in a manner not in accordance with the directions for use may affect their performance and present potential health and safety hazards.
TSCA: These products are defined as articles under the Toxic Substances Control Act and therefore, are exempt from inventory listing requirements.
UL: Tapes 9442 and 9445 have been recognized by Underwriters Laboratories Inc. under Standard UL 969 Marking and Labeling in File MH26206. Tapes 9482PC and 9485PC have been recognized by Underwriters Laboratories Inc. under Standard UL
746C Polymeric Adhesives Systems, Electrical Equipment Component in File MH17478. If you require official recognition of any 350 adhesive under either UL 969 or UL 746C, please contact 3M-customer service at 1-800-362-3550.
For more information on the UL Certification, please visit the website at http://www.3m.com/converter, select UL Recognized Materials, and then select the specific product area.

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.

3M™ Centre
Cain Rd, Binfield, Bracknell RG12 8HT, United Kingdom
3m.co.uk/iatd