



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.

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

Property	Values	Additional Information
Adhesive Type	Acrylic	
Liner	62# Polycoated Kraft	
Liner Thickness	0.11 mm	
Total Tape Thickness (mil)	5 mil	View
Test Method: ASTM D3652		
Total Tape Thickness (mm)	0.127 mm	View


Test Method: ASTM D3652

Liner Print	None
Liner Thickness	4.2 mil
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.

Typical Performance Characteristics

Property	Values	Additional Information
Short Term Temperature Resistance	450 °F	
Short Term Temperature Resistance	232 °C	
Long Term Temperature Resistance	121 °C	
Minimum Long Term Temperature Resistance	-40 °C	
Long Term Temperature Resistance	250 °F	
Minimum Long Term Temperature Resistance	-40 °F	
Static Shear	10000 min	View 
Notes: 1in x 1in size; test terminated after 10,000 minutes		
Static Shear	10000 min	View 
Notes: 1in x 1in size; test terminated after 10,000 minutes		
Static Shear	10000 min	View 
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Static Shear	10000 min	View 


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Static Shear	10000 min	View 
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Notes: 1in x 1in size; test terminated after 10,000 minutes

Static Shear	10000 min	View 
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Notes: 1in x 1in size; test terminated after 10,000 minutes

Static Shear	10000 min	View 
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Notes: 1in x 1in size; test terminated after 10,000 minutes

180° Peel Adhesion	15.8 N/cm	View 
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Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Painted Metal

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	145 oz/in	View 
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Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Painted Metal


Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	15.8 N/cm	View 
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Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Polycarbonate (PC)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	145 oz/in	View 
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Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Polycarbonate (PC)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	13.6 N/cm	View 
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Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Acrylic (PMMA)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion

125 oz/in

View 

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Acrylic (PMMA)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion

13.1 N/cm

View 

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Epoxy

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion

120 oz/in

View 

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Epoxy

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion

9.3 N/cm

View 

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: ABS

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion


85 oz/in

View 

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: ABS


Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	9.8 N/cm	View 
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Test Method: ASTM D3330
Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Polyvinyl chloride (PVC)
Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	90 oz/in	View 
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Test Method: ASTM D3330
Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Polyvinyl chloride (PVC)
Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	8.7 N/cm	View 
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Test Method: ASTM D3330
Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Polypropylene (PP)
Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	80 oz/in	View 
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Test Method: ASTM D3330
Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Polypropylene (PP)
Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	15.8 N/cm	View 
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Test Method: ASTM D3330
Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Glass
Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	145 oz/in	View 
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Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Glass

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion

3.8 N/cm

View 

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: High Density Polyethylene (HDPE)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion

35 oz/in

View 

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: High Density Polyethylene (HDPE)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion

4.4 N/cm

View 

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Low Density Polyethylene (LDPE)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion

40 oz/in

View 

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Low Density Polyethylene (LDPE)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion




10 N/cm

View 




Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Aluminum


Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	95 oz/in	View 
<p>Test Method: ASTM D3330</p> <p>Dwell/Cure Time: 72.0 Dwell Time Units: hr Temp C: 23C Temp F: 72F Environmental Condition: 50%RH Substrate: Aluminum</p> <p>Notes: 12 in/min (300 mm/min)</p>		
180° Peel Adhesion	16.4 N/cm	View 
<p>Test Method: ASTM D3330</p> <p>Dwell/Cure Time: 72.0 Dwell Time Units: hr Temp C: 23C Temp F: 72F Environmental Condition: 50%RH Substrate: Stainless Steel</p> <p>Notes: 12 in/min (300 mm/min)</p>		
180° Peel Adhesion	150 oz/in	View 
<p>Test Method: ASTM D3330</p> <p>Dwell/Cure Time: 72.0 Dwell Time Units: hr Temp C: 23C Temp F: 72F Environmental Condition: 50%RH Substrate: Stainless Steel</p> <p>Notes: 12 in/min (300 mm/min)</p>		
Liner Release	44 g/in	


Available Sizes

Property	Values	Additional Information
Note	Subject to Minimum Order Requirements	
Standard Roll Length	60 yd	
Maximum Length	54.9 m	View 
Width: 1/8 in to 3/8 in width		
Maximum Length	60 yd	View 
Width: 1/8 in to 3/8 in width		
Maximum Length	165 m	View 


Width: 3/8 in to 1/2 in width

Maximum Length	180 yd	View 
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Width: 3/8 in to 1/2 in width

Maximum Length	329 m	View 
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Width: 1/2 in to 1 in widths

Maximum Length	360 yd	View 
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Width: 1/2 in to 1 in widths

Maximum Length	329 m	View 
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Width: 1 in to maximum

Maximum Length	360 yd	View 
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Width: 1 in to maximum

Maximum Available Width	48 in	
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Normal Slitting Tolerance	± 0.8 mm	
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Normal Slitting Tolerance	± 1/32 in	
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Core Size (ID)	76.2 mm	
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Core Size (ID)	3 in	
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Storage and Shelf Life

Product retains its performance and properties for 24 months from date of manufacture if properly stored at room temperature conditions of 72°F (22°C) and 50% R.H. Storage in a plastic bag is recommended.

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.

Bottom Matter

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-362-3550

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-223-7427 or visit www.3m.com/converter. Address correspondence to: 3M Engineered Adhesives Division, 3M Center, Building 220-7E-01, St. Paul, MN 55144-1000. Our fax number is 651-733-9175. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

Automotive Disclaimer

Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, including, but not limited to, automotive electric powertrain battery or high voltage applications. This product does not fully adhere to typical automotive design or quality system requirements, such as IATF 16949 or VDA 6.3. This product may not be manufactured in an IATF certified facility and may not meet a Ppk of 1.33 for all properties. The product may not undergo an automotive production part approval process (PPAP). Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's automotive application and for conducting incoming inspections before use of the product. Failure to do so may result in injury, death, and/or harm to property. No written or verbal statement, report, data or recommendation by 3M related to automotive use of the product shall have any force or effect unless in an agreement signed by the Technical Director of 3M's Automotive Division. Customer assumes all responsibility and risk if customer chooses to use this product in an automotive electric powertrain battery or high voltage application, and 3M will not be liable for any loss or damage arising from or related to the 3M product or customer's use of the product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity or recall costs), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability. In no event shall 3M be liable for any damages in excess of the purchase price paid for the product.

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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 our toll free 3M sales assistance number at 1-800-362-3550.

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.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40065908/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=9485PC

Family Group

Link Tags:



Products	Adhesive Type	Liner	Liner Thickness	Total Tape Thickness (mm)	Short Term Temperature Resistance	Long Term Temperature Resistance	Minimum Long Term Temperature Resistance
9482PC	Acrylic	62# Polycoated Kraft	0.11 mm	0.05 mm	232 °C	250 °F	-40 °C
9485PC	Acrylic	62# Polycoated Kraft	0.11 mm	0.127 mm	232 °C	250 °F	-40 °C
9445	Acrylic	55# Densified Kraft	0.08 mm	0.127 mm	232 °C	250 °F	-40 °C
9675	Acrylic	83# Polycoated Kraft lay flat, tan with green "3M" print	0.16 mm	0.127 mm	232 °C	250 °F	-40 °C
9485EK	Acrylic	78# Extensible Polycoated Kraft	0.14 mm	0.127 mm	232 °C	250 °F	-40 °C
9442	Acrylic	55# Densified Kraft	0.08 mm	0.05 mm	232 °C	250 °F	-40 °C

ISO Statement

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

Information

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