3M™ Adhesive Transfer Tape 7955MP

Last Revision Date: September, 2022

Product Description

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

3M™ High Performance Acrylic Adhesive 200MP is a popular choice for graphic attachment and general industrial joining applications. It provides outstanding adhesion to metal and high surface energy plastics. This adhesive provides some initial repositionability for placement accuracy when bonding to plastics. It also performs well after exposure to humidity and hot/cold cycles.

Product Features

- Up to 400°F short-term heat resistance
- Excellent solvent resistance
- Excellent shear strength to resist slippage and edge lifting

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	PCK	
Primary Liner Type	58# Polycoated Kraft Paper (PCK)	View
Notes: Inner liner is primary (stays with die-cut part); Outer liner is secondary (removed first)		
Secondary Liner Type	58# Polycoated Kraft Paper (PCK)	View
Notes: Inner liner is primary (stays with die-cut part); Outer liner is secondary (removed first)		
Liner Thickness	0.11 mm	
Primary Liner Thickness	0.11 mm	

Secondary Liner Thickness	0.11 mm	
Liner Color	Tan	View
Test Name: Primary		
Liner Color	Tan	View
Test Name: Secondary		
Total Tape Thickness (mil)	5.2 mil	View
Test Method: ASTM D3652		
Total Tape Thickness (mm)	0.13 mm	View
Test Method: ASTM D3652		
Liner Print	200MP	
Liner Thickness	4.2 mil	
Primary Liner Thickness	4.2 mil	
Secondary Liner Thickness	4.2 mil	

Typical Performance Characteristics

Property	Values	Additional Information
90° Peel Adhesion	6 N/cm	View
Test Method: ASTM D3330 Dwell/Cure Time: 15.0 Dwell Time Units: min Temp C: 23C Temp F: 72F Environmental Condition: 50%RH Substrate: Stainless Steel Backing: 2 mil Aluminum Foil		
90° Peel Adhesion	55 oz/in	View
Test Method: ASTM D3330 Dwell/Cure Time: 15.0 Dwell Time Units: min Temp C: 23C		

Temp F: 72F
Environmental Condition: 50%RH
Substrate: Stainless Steel
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	11.8 N/cm	View

Test Method: ASTM D3330

Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	108 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: Stainless Steel
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	20 N/cm	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 70C
Temp F: 158F
Environmental Condition: 50%RH
Substrate: Stainless Steel
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	183 oz/in	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 70C
Temp F: 158F
Environmental Condition: 50%RH
Substrate: Stainless Steel
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	9.2 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
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	84 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: Aluminum
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	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
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	27 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
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	8.9 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: Acrylic (PMMA)
Backing: Aluminum Foil

90° Peel Adhesion	81 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)
Backing: Aluminum Foil

90° Peel Adhesion	12.3 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: Glass
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	112 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: Glass
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	5 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: Polyvinyl chloride (PVC)
Backing: Aluminum Foil

90° Peel Adhesion	46 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: Polyvinyl chloride (PVC)
Backing: Aluminum Foil

90° Peel Adhesion	9.6 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: Polycarbonate (PC)
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion	88 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: Polycarbonate (PC)
Backing: 2 mil Aluminum Foil

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

Tensile Lap Shear – Peak Load	174 lb	View

Test Method: ASTM D1002

Substrate: Aluminum

Notes: 0.5 in² sample size

Short Term Temperature Resistance	300 °F	
Short Term Temperature Resistance	149 °C	
Long Term Temperature Resistance	93 °C	
Long Term Temperature Resistance	200 °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

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	2284 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

180° Peel Adhesion	15.1 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: Stainless Steel
Backing: Aluminum Foil

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

180° Peel Adhesion	139 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: Stainless Steel
Backing: Aluminum Foil

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

Electrical and Thermal Properties

Property	Values	Additional Information
Breakdown Voltage	3000 V	
Insulation Resistance	>1.3 x 10^15 Ω	View
Test Method: Mil-I-46058C		
Dielectric Constant 1KHz	3.32	View
Test Method: ASTM D150 Temp C: 23C Temp F: 72F		
Dissipation Factor	0.011	
Dielectric Strength	674 V/mil	View
Test Method: ASTM D149		
Thermal Conductivity	0.19 W/m/K	View
Test Method: ASTM C518 Notes: results listed are at 109°F		
Thermal Conductivity	1.24 (btu-in)/(h-ft²-°F)	View
Test Method: ASTM C518 Notes: results listed are at 109°F		
Coefficient of Thermal Expansion	527 ppm/°C	

Typical Environmental Performance

Humidity Resistance – High humidity has a minimal effect on adhesive performance. Bond strength 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. After 100 hours at room temperature, the high bond strength is maintained.
Temperature Cycling Resistance – High bond strength is maintained after cycling four times through:
4 hours at 158°F (70°C)
4 hours at -20°F (-29°C)
4 hours at 73°F (22°C)
Chemical Resistance – When properly applied, nameplate and decorative trim parts will hold securely after exposure to numerous chemicals including oil, mild acids and alkalis.
Bond Build-up: The bond strength of 3M™ High Performance Acrylic Adhesive 200MP increases as a function of time and temperature
Temperature/Heat Resistance: 3M™ High Performance Acrylic Adhesive 200MP is usable for short periods (minutes, hours) at temperatures up to400°F (204°C) and for intermittent longer periods (days, weeks) up to 300°F (149°C).
Lower Temperature Service Limit: The glass transition temperature for 3M™ High Performance Acrylic Adhesive 200MP is -31°F (-35°C). Many applications survive below this temperature (factors affecting successful applications include: materials being bonded, dwell at RT before cold exposure, and stress below the TG[i.e.expansion/contraction stresses, impact]). Optimum conditions are: bonding high surface energy materials, longer time at RT before cold exposure, and little or no stress below the TG. The lowest service temperature is -40°F (-40°C).

Storage and Shelf Life

It is suggested that products are stored at room temperature conditions of 70°F (21°C) and 50% relative humidity.
If stored properly, product retains its performance and properties for 24 months from date of manufacture.

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
MSDS: 3M has not prepared a MSDS for this product which is not subjected 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, 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 Standard 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-19834
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Bottom Matter

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Handling/Application Information

Application Examples

- Long term bonding of graphic nameplates and overlays (“subsurface” printed polycarbonate or polyester) to metal and high surface energy plastics in the aerospace, medical and industrial equipment, automotive, appliance and electronics markets.

- Bonding metal nameplates and rating plates in the aerospace, medical and industrial equipment, automotive, appliance and electronics markets.

- Bonding graphic overlays for membrane switches and for bonding the complete switch to the equipment surface.

- High speed processing of parts in the medical, telecommunications and electronics markets (medical components, durable labels, and flexible circuits).

- Lamination to industrial foams for rotary die-cutting of small gaskets for industrial and electronics markets.

Application Techniques

For maximum bond strength (during installation of the final part) the surface should be thoroughly cleaned and dried. Typical cleaning solvents are heptane (for oily surfaces) or isopropyl alcohol for plastics. Use reagent grade solvents since common household materials like rubbing alcohol frequently contain oils to minimize the drying affect on skin and can interfere with the performance of a pressure-sensitive adhesive.

*Note: Carefully read and follow the manufacturer’s precautions and directions for use when working with solvents. These cleaning recommendations may not be in compliance with the rules of certain air quality management districts in California; consult applicable rules before use.

It is necessary to provide pressure during lamination (1.5-20 pli recommended) and during final part installation (10-15 psi) to allow the adhesive to come into direct contact with the substrate. Using a hard edged plastic tool, which is the full width of the laminated part, helps to provide the necessary pressure at the point of lamination. Heat can increase bond strength when bonding to metal parts (generally this same increase is observed at room temperature over longer times, weeks). For plastic parts, the bond strength is not enhanced with the addition of heat.

The ideal adhesive application temperature range is 60°F (15.6°C) to 100°F (38°C). Application is not recommended if the surface temperature is below 50°F (10°C) because the adhesive becomes too firm to adhere readily. Once properly applied, at the recommended application temperature, low temperature holding is generally satisfactory (please refer to section VII of the Typical Physical Properties and Performance Characteristics).

When bonding a thin, smooth, flexible material to a smooth surface, it is generally acceptable to use 2 mils of 3M™ Adhesive 200MP. If a texture is visible on one or both surfaces, the 5 mil 3M adhesive 200MP would be suggested. If both materials are rigid, it may be necessary to use a thicker adhesive to successfully bond the components. 3M™ VHB™ Acrylic Foam Tapes may be required (please refer to the data page 70-0709-3830-6).

To apply adhesives in a wide web format, lamination equipment is required to ensure acceptable quality. To learn more about working with pressure-sensitive adhesives please refer to technical bulletin, Lamination Techniques for Converters of Laminating Adhesives (70-0704-1430-8). For additional dispenser information, contact your local 3M sales representative, or the toll free 3M sales assistance number at 1-800-362-3550.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40065948/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=7955MP

Family Group

Link Tags:

7952MP 7955MP 7962MP 7965MP 9667MP 9668MP

Products	Adhesive Type	Liner	Primary Liner Type	Secondary Liner Type	Liner Thickness	Primary Liner Thickness	Secondary Liner Thickness	Liner Color	Total Tape Thickness (mm)	Short Term Temperature Resistance	Long Term Temperature Resistance

7952MP	Acrylic	PCK	58# Polycoated Kraft Paper (PCK)	58# Polycoated Kraft Paper (PCK)	0.11 mm	0.11 mm	0.11 mm	Tan	0.06 mm	149 °C	200 °F
9667MP	Acrylic	78# Polycoated Kraft Paper (PCK)	N/A	N/A	0.15 mm	N/A	N/A	Tan	0.06 mm	149 °C	200 °F
7962MP	Acrylic	PCK	78# Polycoated Kraft Paper (PCK)	83# Polycoated Kraft Paper (PCK)	0.15 mm	0.15 mm	0.11 mm	Tan	0.06 mm	149 °C	200 °F
9668MP	Acrylic	78# Polycoated Kraft Paper (PCK)	N/A	N/A	0.15 mm	N/A	N/A	Tan	0.13 mm	149 °C	200 °F
7965MP	Acrylic	PCK	78# Polycoated Kraft Paper (PCK)	83# Polycoated Kraft Paper (PCK)	0.15 mm	0.15 mm	0.11 mm	Tan	0.13 mm	149 °C	200 °F
7955MP	Acrylic	PCK	58# Polycoated Kraft Paper (PCK)	58# Polycoated Kraft Paper (PCK)	0.11 mm	0.11 mm	0.11 mm	Tan	0.13 mm	149 °C	200 °F

ISO Statement

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

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