

Technical Data Sheet

3M™ Adhesive Transfer Tape 9555

Product Description

3M™ Industrial Acrylic Adhesive 220 is an economical choice for most general industrial bonding in metal, painted metal, and high surface energy plastic applications.



Product Features

- Up to 350°F short-term heat resistance
- Good chemical resistance
- Good shear strength

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) 4.9 mil View

Test Method: ASTM D3652

Total Tape Thickness (mm) 0.12 mm View

Test Method: ASTM D3652

Liner Print 3M

Liner Thickness 4.2 mil

Primary Liner Thickness 4.2 mil

Secondary Liner Thickness 4.2 mil

Typical Performance Characteristics

Property	Values	Additional Information
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90° Peel Adhesion	5.8 N/cm	View
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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	53 oz/in	View
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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 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: 2 mil Aluminum Foil

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

90° Peel Adhesion

98 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

7.1 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: ABS

Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion

65 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

9.7 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

89 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

7.1 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: Polycarbonate (PC)
Backing: 2 mil Aluminum Foil

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

90° Peel Adhesion

63 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)

Short Term Temperature Resistance

350 °F

View 

Test Condition: Short Term (minutes, hour)

Short Term Temperature Resistance


177 °C

View 

Test Condition: Short Term (minutes, hour)

Long Term Temp C

93 °C

View 

Test Condition: Long Term (day, weeks)

Long Term Temp F

200 °F

View 

Test Condition: Long Term (day, weeks)

Static Shear

5000 min

View 

Notes: 1in x 1in



Static Shear

4000 min

View 

Notes: 1in x 1in

Available Sizes

Property	Values	Additional Information
Master Width	1.22 m	View 
Notes: More sizes may be available. Please talk to your local 3M representative for more information.		
Master Width	48 in	View 
Notes: More sizes may be available. Please talk to your local 3M representative for more information.		

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™ Industrial Acrylic Adhesive 220 increases as a function of time and temperature

Temperature/Heat Resistance: 3M™ Industrial Acrylic Adhesive 220 is usable for short periods (minutes, hours) at temperatures up to 350°F (177°C) and for intermittent longer periods (days, weeks) up to 250°F (121°C).

Lower Temperature Service Limit: 40°F (-40°C). The glass transition temperature, TG, for 3M™ Industrial Acrylic Adhesive 220 is -31°F (-35°C). Many applications survive below this temperature. Factors to consider are: the materials being bonded, the dwell at RT before cold exposure and the stresses below the TG (ie. expansion/contraction stresses, impact). Optimum conditions are: bonding HSE materials, longer time at RT before cold exposure and little or no stress below the glass transition temperature.

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 UL 969. 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

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

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,

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Bottom Matter

Property	Values	Additional Information
Bottom Matter Logo and Address	3M Industrial Adhesives and Tapes Division 3M Center, Building 225-3S-06 St. Paul, MN 55144-1000 800-362-3550	
Bottom Matter Images	[Image 4] [Image 5]	

Trademarks

3M is a trademark of 3M Company.

Handling/Application Information

Application Examples

- Attaching nameplates, appliqués, and decorative trim to metal and high surface energy plastics
- Laminating to sub-surface printed polycarbonate or polyester graphic overlay materials
- Used in the automotive, appliance and electronics industries for cost-effective, long-term bonding applications

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40065898/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=9555

Family Group

Link Tags:

- 9502
- 9505
- 9552
- 9555

Products	Total Tape Thickness (mm)	Short Term Temperature Resistance	Long Term Temp C	Long Term Temp F	Adhesive Type	Secondary Liner Type
9502	0.06 mm	177 °C	93 °C	200 °F	N/A	N/A
9505	0.12 mm	177 °C	N/A	200 °F	N/A	N/A

9555	N/A	177 °C	93 °C	N/A	Acrylic	58# Polycoated Kraft Paper (PCK)
9552	N/A	177 °C	93 °C	N/A	Acrylic	58# Polycoated Kraft Paper (PCK)

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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