

3M™ Double Coated Tape 9500PC

Last Revision Date: May, 2022

Product Description

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

3M™ Double Coated Tape 9500PC features a thin polyester film for dimensional stability and improved handling with ease of die-cutting and laminating. 3M™ Adhesive 350 is a medium-firm acrylic adhesive that provides a combination of high wet grab and initial adhesion and good shear holding power to a wide variety of materials, including many plastics.

Product Features

- 3M™ Adhesive 350 is a firm acrylic adhesive that provides very high adhesion to a wide variety of materials, excellent shear holding power, high temperature resistance and excellent UV resistance.
- 3M adhesive 350 provides exceptional temperature and chemical resistance and withstands tough application environment.
- 3M™ Double Coated Tape 9500PC has a moisture resistant liner which can withstand high humidity conditions with minimal cockling or wrinkling.
- This tape has a film carrier, which can add dimensional stability to substrates. The carrier also provides easier handling during slitting and die-cutting.

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	
Adhesive Type	350	View ^
Test Name: Faceside		
Notes: Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.		
Adhesive Type	350	View ^
Test Name: Backside		

Notes: Backside adhesive is on the exterior of the roll, exposed when liner is removed.

Adhesive Carrier	Clear PET (Polyester)
Liner	Polycoated Kraft

Typical Performance Characteristics

Liner Thickness 0.11 mm Liner Color View ^ Natural Test Name: Primary Adhesive Thickness View ^ 0.058 mm Test Name: Backside Notes: The caliper listed is based on a calculation from manufacturing controlled adhesive coat weight. While past data pages have listed nominal thicknesses of 1 and 2 mils, the coat weight (and theoretical caliper) has not changed. Carrier Thickness 0.025 mm Total Tape Thickness View ^ 5.6 mil Test Method: ASTM D3652 Total Tape Thickness View ^ 0.14 mm Test Method: ASTM D3652 Adhesive Thickness View ^ 2.3 mil Test Name: Backside Notes: Backside adhesive is on the exterior of the roll, exposed when liner is removed. Adhesive Thickness View ^ 0.058 mm Test Name: Faceside Notes: Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed. Adhesive Thickness View ^ 2.3 mil Test Name: Faceside Notes: Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed. Carrier Thickness 1 mil Liner Print None Liner Thickness 4.5 mil

Property	Values	Additional Information
90° Peel Adhesion	7.7 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	71 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	10.1 N/cm	View ^
Test Method: ASTM D3330		
Backing: 2 mil Aluminum Foil		
Notes: 12 in/min (300 mm/min)		
90° Peel Adhesion	93 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	13.2 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)		

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	8.1 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	74 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	4.8 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: Polypropylene (PP) Backing: 2 mil Aluminum Foil Notes: 12 in/min (300 mm/min)			
90° Peel Adhesion	44 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: Polypropylene (PP) Backing: 2 mil Aluminum Foil			
Notes: 12 in/min (300 mm/min)			
90° Peel Adhesion	6.5 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: Polycarbonate (PC) Backing: 2 mil Aluminum Foil			

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

90° Peel Adhesion	60 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)		
90° Peel Adhesion	8.4 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: Polyester (PET) Backing: Aluminum Foil		
90° Peel Adhesion	77 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: Polyester (PET) Backing: Aluminum Foil		
90° Peel Adhesion	3.6 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: High Density Polyethylene (HDPE) Backing: 2 mil Aluminum Foil Notes: 12 in/min (300 mm/min)		
90° Peel Adhesion	33 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) Backing: 2 mil Aluminum Foil Notes: 12 in/min (300 mm/min)		
Short Term Temperature Resistance	350 °F	

Standard Roll Length

Short Term Temperature Resistance	177 °C	
Long Term Temperature Resistance	93 °C	
Long Term Temperature Resistance	200 °F	
Static Shear	10000 min	View ^
Test Method: ASTM D3654		
Notes: 0.5 in² sample size		
Static Shear	10000 min	View ^
Test Method: ASTM D3654		
Notes: 0.5 in² sample size		
180° Peel Adhesion	15.3 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: Stainless Steel Backing: Aluminum Foil Notes: 12 in/min (300 mm/min) 180° Peel Adhesion Test Method: ASTM D3330	140 oz/in	View ^
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)		
Property	Values	Additional Information
Note	Subject to Minimum Order Requirements	
Standard Roll Length	33 m	

36 yd

Maximum Length	132 m	View ^
Width: 1/4in - 1/2in		
Maximum Length	144 yd	View ^
Width: 1/4in - 1/2in		
Maximum Length	329 m	View ^
Width: 1/2 in to 48 in		
Maximum Length	360 yd	View ^
Width: 1/2 in to 48 in		
Minimum Available Width	6.35 mm	
Minimum Available Width	1/4 in	
Maximum Available Width	1220 mm	
Maximum Available Width	48 in	
Normal Slitting Tolerance	0.8 mm	
Normal Slitting Tolerance	±1/32 in	
	5	
Core Size (ID)	76.2 mm	
Core Size (ID)	3 in	

Storage and Shelf Life

Store in original cartons at 70°F (21°C) and 50% relative humidity.

If stored under proper conditions, product retains its performance and properties for 24 months from date of manufacture.

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, the products should not present a health and safety hazard. However, use or processing of the 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.

Bottom Matter

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Handling/Application Information

Application Examples

- Dissimilar materials joining, such as metal to plastic.
- High performance joining and bonding.

Application Techniques

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and improves 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.*

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.

*Carefully read and follow the manufacturer's precautions and directions for use when working with solvents.

Application Equipment

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/b40071894/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/? gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=9500PC

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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