



Technical Data Sheet

3M™ Double Coated Tape 9495LE

Product Description

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

3M[™] 9495LE is a 170µm Double Coated Polyester Tape featuring 3M[™] Type 300LSE Acrylic Adhesive. Performance features include superior adhesion to Polypropylene, great resistance to consumer chemicals and excellent holding power. 3M type 300LSE acrylic adhesive has a long history of successfully bonding a wide variety of similar and dissimilar materials such as metals, most plastics, glass, papers, and painted surfaces.

Product Features

- This tape has a film carrier which can add dimensional stability to foams and other substrates and also makes it easier to handle the tape during slitting and die-cutting.
- The bond strength of 3M™ Laminating Adhesive 300LSE increases as a function of time and temperature, and has very high initial adhesion.

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 Carrier Clear Polyester Liner 58# Polycoated Kraft Paper (PCK) Liner Thickness 0.11 mm Liner Color Tan printed with "3M 300LSE" View ^

Test Name: Primary

Adhesive Thickness 0.086 mm View ^

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	0.013 mm	
Total Tape Thickness (mil)	6.7 mil	View ^
Test Method: ASTM D3652		
Total Tape Thickness (mm)	0.17 mm	View ^
Test Method: ASTM D3652		
Adhesive Thickness	0.4 1	View ^
	3.4 mil	view
Test Name: Backside Notes: Backside adhesive is on the exterior of t	he roll, exposed when liner is removed.	
Adhesive Thickness	0.071 mm	View ^
Test Name: Faceside	as roll, evened when unwound and liner remove	۵
Notes: Faceside adhesive is on the interior of the	ne roll, exposed when unwound and liner remove	a.
Adhesive Thickness	2.8 mil	View ^
Test Name: Faceside		
Notes: Faceside adhesive is on the interior of the state	ne roll, exposed when unwound and liner remove	d.
Carrier Thickness	0.5 mil	
Liner Print	300LSE	
Liner Thickness	4.2 mil	
Typical Performance Characteristics		
Property	Values	Additional Information
Short Term Temperature Resistance	300 °F	
Short Term Temperature Resistance	149 °C	
Long Term Temperature Resistance	93 °C	

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200 °F

Static Shear	>10,000 min	View ^	
Test Method: ASTM D3654			
Notes: 0.5 in² sample size			
Static Shear	>10,000 min	View ^	
Test Method: ASTM D3654			
Notes: 0.5 in² sample size			
Solvent Resistance	Very Good		
180° Peel Adhesion	6.6 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: Aluminum Foil			
Notes: 12 in/min (300 mm/min)			
180° Peel Adhesion	60 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: Aluminum Foil			
Notes: 12 in/min (300 mm/min)			
	9.9 N/cm	View ^	
Notes: 12 in/min (300 mm/min)	9.9 N/cm	View ^	
Notes: 12 in/min (300 mm/min) 180° Peel Adhesion	9.9 N/cm	View ^	
Notes: 12 in/min (300 mm/min) 180° Peel Adhesion Test Method: ASTM D3330 Dwell/Cure Time: 72.0	9.9 N/cm	View ^	
Notes: 12 in/min (300 mm/min) 180° Peel Adhesion 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	9.9 N/cm	View ^	
Notes: 12 in/min (300 mm/min) 180° Peel Adhesion Test Method: ASTM D3330 Dwell/Cure Time: 72.0 Dwell Time Units: hr Temp C: 23C Temp F: 72F Environmental Condition: 50%RH	9.9 N/cm	View ^	
Notes: 12 in/min (300 mm/min) 180° Peel Adhesion 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	9.9 N/cm	View ^	
Notes: 12 in/min (300 mm/min) 180° Peel Adhesion 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	9.9 N/cm 90 oz/in	View ^	
Notes: 12 in/min (300 mm/min) 180° Peel Adhesion 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)			



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

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

Substrate: Polypropylene (PP)

Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	14.2 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: Polycarbonate (PC) Backing: Aluminum Foil Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	130 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: Aluminum Foil Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	12 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: Aluminum Foil Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	110 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: Aluminum Foil Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	13.7 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: Polypropylene (PP)		



Backing: Aluminum Foil

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: Polypropylene (PP) Backing: Aluminum Foil Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	10.4 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: Glass Backing: Aluminum Foil

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

180° Peel Adhesion	95 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: Aluminum Foil			
Notes: 12 in/min (300 mm/min)			

Electrical and Thermal Properties

Property	Values	Additional Information
Breakdown Voltage	7100 V	

Typical Environmental Performance

Humidity Resistance: High humidity has minimal effect on adhesive performance. No significant reduction in bond strength is observed after exposure for 72hrs at 150°F (65°C) and 90% relative humidity.

UV Resistance: When properly applied, nameplates and decorative trim parts are not adversely affected by exposure to direct sunlight.

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 six times through:

8 hours at -4°F (-20°C)

8 hours at 150°F (65°C) /90% RH

Chemical Resistance: When properly applied, nameplate and decorative trim parts will hold securely after exposure to numerous chemicals including oil, mild acids and alkalis.

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 this product which is 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 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.

TSCA: This product is defined as an article under the Toxic Substances Control Act and therefore, it is exempt from inventory listing requirements.

RoHs Complaint/REACH Compliant: This product complies with the European Union's "Restriction of Hazardous Substances" (RoHs) initiative and with European REACH regulations 2002/95/EC and 2005/618/EC.

Bottom Matter

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Trademarks

3M is a trademark of 3M Company.

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-251-8634. Address correspondence to: 3M, Electronics Markets Materials Division, 3M Center, Building 225-3S-06, St. Paul, MN 55144- 1000. Our fax number is 651-778-4244 or 1-877-369-2923. 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

- Foam to powder coated painted surfaces.
- Low surface energy plastic adhesion.
- Lens bonding applications

Application Techniques

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure and moderate heat, from 100°F (38°C) to 130°F (54°C), will assist the adhesive in developing intimate contact with the bonding surface.



To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Typical cleaning solvents are methyl ethyl ketone for metals or isopropyl alcohol for plastics. Carefully read and follow manufacturer's precautions and directions for use when using cleaning solvents.

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.

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 1-800-251-8634.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40060169/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/? gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=9495LE

Information

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