3M™ Double Coated Tape 9495LE

Last Revision Date: May, 2022

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	
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	6.7 mil	View
Test Method: ASTM D3652		
Total Tape Thickness	0.17 mm	View
Test Method: ASTM D3652		
Adhesive Thickness	3.4 mil	View
Test Name: Backside Notes: Backside adhesive is on the exterior of the roll, exposed when liner is removed.		
Adhesive Thickness	0.071 mm	View
Test Name: Faceside Notes: Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.		
Adhesive Thickness	2.8 mil	View
Test Name: Faceside Notes: Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.		
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	

Long Term Temperature Resistance	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)

180° Peel Adhesion	9.9 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: Stainless Steel
Backing: Aluminum Foil

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

180° Peel Adhesion	90 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)

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

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Automotive Disclaimer

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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

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