



Technical Data Sheet

3M™ Double Coated Tape 9474LE

Product Description

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

3M™ 9474LE 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.
- 3M™ Double Coated Tape 9474LE features a dual liner for ease in selective 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

Attribute Name	Test Method	Test Condition	Value
Adhesive Type			Acrylic
Adhesive Carrier			Clear Polyester
Adhesive Thickness		Faceside	0.071 mm (2.8 mil) ¹
Carrier Thickness			0.013 mm (0.5 mil)
Adhesive Thickness		Backside	0.086 mm (3.4 mil) ²
Total Tape Thickness	ASTM D3652		0.17 mm (6.7 mil)
Liner			PCK
Liner Print			300LSE
Primary Liner Thickness			0.11 mm (4.2 mil)
Secondary Liner Thickness			0.11 mm (4.2 mil)
Primary Liner Color			Tan
Secondary Liner Color			Tan

¹ Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.

² Backside adhesive is on the exterior of the roll, exposed when liner is removed.

Typical Performance Characteristics

180° Peel Adhesion

Temperature: 22 °C (72 °F)

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

Dwell Time	Substrate	Value
15 min	Stainless Steel	6.6 N/cm (60 oz/in) ¹
72 h	ABS	12 N/cm (110 oz/in) ¹

Dwell Time	Substrate	Value
72 h	Glass	10.4 N/cm (95 oz/in) ¹
72 h	Polycarbonate (PC)	14.2 N/cm (130 oz/in) ¹
72 h	Polypropylene (PP)	13.7 N/cm (125 oz/in) ¹
72 h	Stainless Steel	9.9 N/cm (90 oz/in) ¹

¹ 12 in/min (300 mm/min)

Static Shear

Test Method: ASTM D3654

Temperature	Test Condition	Value
22 °C (72 °F)	1000g	>10,000 min ¹
70 °C (158 °F)	500g	>10000 min ¹

¹ 1/2 in x 1 in sample area, test terminated at 10,000 minutes

Attribute Name	Value
Short Term Temperature Resistance	149 °C (300 °F) ¹
Long Term Temperature Resistance	93 °C (200 °F) ²

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

Typical Environmental Performance

Attribute Name	Value
Solvent Resistance	Very Good

Typical Environmental Characteristics

Environmental Resistance

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.

Electrical and Thermal Properties

Attribute Name	Value
Breakdown Voltage	7,100 V

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.

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 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.

Automotive Disclaimer

Select Automotive Applications:

This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

Information

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For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550 or visit www.3M.com.

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