



Technical Data Sheet

3M™ Double Coated Polyester Tape L2 + DCP



[Product Details](#)

Product Description

3M™ Double Coated Polyester Tape L2+DCP, 3M™ Double Coated Differential Tape L2+DCD and 3M™ Adhesive Transfer Tapes L2+T3 and L2+T5 feature a proprietary 3M modified acrylic adhesive that withstands temperatures up to 225°F (107°C) and offers high initial tack, excellent peel adhesion and strength to many open and closed cell foams. These tapes bond well to Polyurethane (PU) Ether, PU Ester, Cross-Linked Polyethylene (PE) Foam, EPDM Foam, Neoprene Foam, Nitrile Foam and Microcellular Urethane. All constructions from the L2 Family feature an 83# kraft colored, unprinted, polycoated kraft (PCK) liner for superior processing.

Product Features

- Proprietary 3M modified acrylic adhesive that withstands temperatures up to 225° F (107° C)
- Adhesive offers high initial tack to many open and closed cell foam materials
- Excellent peel adhesion and shear strength
- Bonds well to Polyurethane (PU) Ether, PU Ester, cross-linked Polyethylene (PE) foam, EPDM foam, neoprene foam, nitrile foam, and microcellular foam
- An 83# tan colored, unprinted polycoated kraft (PCK) liner for superior processing

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	Value
Product Construction	L2+DCP is a double-coated polyester tape that provides excellent adhesion to a wide variety of substrates, including many open and closed cell foams.

Attribute Name	Test Method	Value
Adhesive Type		Acrylic
Total Tape Thickness	ASTM D3652	0.121 mm (4.8 mil)
Liner		83# PCK
Liner Thickness		0.145 mm (6.2 mil)
Primary Liner Color		Kraft

Typical Performance Characteristics

90° Peel Adhesion

Temperature: 22 °C (72 °F)

Test Condition: Backside

Dwell Time: 72 h

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

Substrate	Value
ABS	3.2 N/cm (29 oz/in) ¹
Aluminum	4.8 N/cm (44 oz/in) ¹
Polypropylene (PP)	4 N/cm (37 oz/in) ¹

Substrate	Value
Stainless Steel	7.7 N/cm (70 oz/in) ¹

¹ 12 in/min (300 mm/min)

T-Peel Foam Faceside

Temperature: 22 °C (72 °F)

Dwell Time: 72 h

Test Method: ASTM D1876

Substrate	Value
Cross-Linked PE Foam	5.8 N/cm (53 oz/in)
EDPM Foam	3.8 N/cm (35 oz/in)
Neoprene Foam	4.5 N/cm (41 oz/in)
Nitrile Foam	2.6 N/cm (24 oz/in)

Static Shear

Test Condition: 1000g

Dwell Time: 72 h

Test Method: ASTM D3654

Temperature	Value
22 °C (72 °F)	10,000 min ¹
70 °C (158 °F)	4,780 min ¹

¹ 1 in x 1 in sample area, test terminated after 10,000 minutes

Attribute Name	Value
Short Term Temperature Resistance	121 °C (250 °F) ¹
Long Term Temperature Resistance	93 °C (200 °F) ²

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

Typical Environmental Characteristics

Environmental Resistance

Temperature Resistance:The L2 adhesive family is usable for short periods (minutes, hours) at temperatures up to 225°F (107°C) and for intermittent longer periods of time (days, weeks) up to 170°F (77°C).

Lower Service Temperature:-40°F (-40°C)

Humidity Resistance:High humidity has minimal effect on adhesive performance. No significant reduction in bond strength is observed after exposure for 7 days at 90°F (32°C) and 90% relative humidity.

Handling/Application Information

Application Techniques

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm pressure during application 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. 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.

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.

Available Sizes

Attribute Name	Value
Available Width	1372 mm (54 in)
Core Size (ID)	76.2 mm (3 in)
Normal Slitting Tolerance	±0.8 mm (±1/32 in)
Note	Subject to Minimum Order Requirements
Standard Roll Length	229 m (250 yd)

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

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Disclaimer: 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit www.3M.com.

ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

3M™ Industrial Adhesives and Tapes Division
3M Center, St. Paul, MN 55144-1000
3M.com/iatd

©3M 2024 (6/24)