



## Technical Data Sheet

### 3M™ Adhesive Transfer Tape L2 + T5



[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+T5 is a 5-mil transfer tape that shares the same benefits of L2+T3, but offers a 2 mil thicker coat weight to adhere to the most structured open and closed cell foam surfaces.

Attribute Name	Test Method	Value
Adhesive Type		Acrylic
Total Tape Thickness	ASTM D3652	0.127 mm (5 mil)
Liner		83# PCK
Liner Thickness		0.145 mm (6.2 mil)
Primary Liner Color		Kraft

#### Typical Performance Characteristics

##### 90° Peel Adhesion

Temperature: 23 °C (73 °F)

Test Condition: Backside

Dwell Time: 72 h

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

Substrate	Value
ABS	4.3 N/cm (39 oz/in) <sup>1</sup>
Aluminum	6.7 N/cm (61 oz/in) <sup>1</sup>

Substrate	Value
Polypropylene (PP)	4.6 N/cm (42 oz/in) <sup>1</sup>
Stainless Steel	9 N/cm (82 oz/in) <sup>1</sup>

<sup>1</sup> 304 mm/min (12 in/min)

#### T-Peel Foam Faceside

Temperature: 23 °C (73 °F)

Dwell Time: 72 h

Test Method: ASTM D1876

Substrate	Value
Cross-Linked PE Foam	5 N/cm (46 oz/in)
EDPM Foam	9 N/cm (82 oz/in)
Neoprene Foam	4.2 N/cm (38 oz/in)
Nitrile Foam	3.4 N/cm (31 oz/in)

#### Static Shear

Test Condition: 1000 g

Dwell Time: 72 h

Test Method: ASTM D3654

Temperature	Value
23 °C (73 °F)	10,000 min <sup>1</sup>
70 °C (158 °F)	1,383 min <sup>1</sup>

<sup>1</sup> 25 x 25 mm (1 in x 1 in) sample area, test terminated after 10,000 minutes

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

<sup>1</sup> Short Term (minutes, hour)

<sup>2</sup> 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.

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## **ISO Statement**

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