

August, 2016

3M[™] Adhesive Transfer Tape L2 + T3

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

Property	Values	
Adhesive Thickness	0.076 mm	3.0 mil
Liner Material	83# PCK	
Liner Thickness	0.145 mm	6.2 mil
Liner Color	Kraft	
Product Construction	L2+T3 is a 3-mil transfer tape that does not have a carrier, this enables it to provide maximum conformability and good adhesion to open and closed cell foam surfaces.	

Typical Performance Characteristics

Property	Values	Method	Dwell/Cure Time	Test Condition	Notes
Static Shear	10,000 min	ASTM D3654	72 hr	1000 g @ Room Temperature	1 in² sample size
Static Shear	1126 min	ASTM D3654	72 hr	1000 g @ 70°C (158°F)	1 in² sample size

T-Peel Adhesion to Foam (Faceside)		Substrate
3.5 N/cm	32 oz/in	EDPM Foam
3.3 N/cm	30 oz/in	Neoprene Foam
4.6 N/cm	42 oz/in	Cross-Linked PE Foam
2.7 N/cm	25 oz/in	Nitrile Foam

Property: T-Peel Adhesion to Foam (Faceside)

Method: ASTM D1876

Dwell/Cure Time: 72 hr @ Room Temperature

Backside 90° Peel Adhesion		Substrate
5 N/cm	46 oz/in	Aluminum
7.4 N/cm	65 oz/in	Stainless Steel
3.8 N/cm	35 oz/in	Polypropylene (PP)
3.7 N/cm	34 oz/in	ABS

Property: Backside 90° Peel Adhesion Method: ASTM D3330 Dwell/Cure Time: 72 hr @ Room Temperature Backing: Aluminum Foil

Available Sizes

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

Environmental Performance

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 in original cartons at 70°F (21°C) and 50% relative humidity.

If stored under proper conditions, product retains its performance and properties for 12 months from the date of shipment.

Family Group

	L2 + T3	L2 + T5
Adhesive Thickness (mm)	0.076	0.127
Liner Material	83# PCK	83# PCK
Liner Thickness (mm)	0.145	0.145
Liner Color	Kraft	Kraft

References

1. Safety Data Sheet

Url: https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=L2 + T3

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product 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. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer

Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 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 OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 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 where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.