

# August, 2016

# **3M™ Adhesive Transfer Tape L3 + T3**

### **Product Description**

3M<sup>™</sup> Adhesive Transfer Tapes L3+T3 and L3+T5 consist of a proprietary specialty acrylic adhesive designed to withstand temperatures up to 275°F (135°C) and have a good adhesion to elastomeric substrates. They bond well to Santoprene<sup>™</sup>, Neoprene Rubber, Butyl Rubber and many versions of EPDM Rubber. All constructions from the L3 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 275°F (135°C)
- Adhesive offers good adhesion to many elastomeric substrates
- Excellent peel adhesion and shear strength
- Bonds well to Santoprene™, neoprene rubber, butyl rubber, nitrile rubber, and many versions of EPDM rubber
- 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 mil
Liner Material	83# PCK	
Liner Thickness	0.145 mm	6.2 mil
Liner Color	Kraft	
Product Construction	L3+T3 is a 3-mil transfer tape that does not have a carrier, this enables it to provide maximum conformability and good adhesion to elastomeric 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	4,218 min	ASTM D3654	72 hr	1000 g @ 70°C (158°F)	1 in² sample size

T-Peel Adhesion to Elastomeric Substrates (Faceside)		Substrate
2.7 N/cm	25 oz/in	TPV
2.5 N/cm	23 oz/in	Neoprene Rubber
1.9 N/cm	17 oz/in	Butyl Rubber
2.6 N/cm	24 oz/in	EPDM Rubber

Property: T-Peel Adhesion to Elastomeric Substrates (Faceside)

Method: ASTM D1876

Dwell/Cure Time: 72 hr @ Room Temperature

Failure mode: POR

notes: POR=Pop Off Rubber

Backside 90° Peel Adhesion		Substrate
6.1 N/cm	56 oz/in	Aluminum
9.9 N/cm	90 oz/in	Stainless Steel
9.7 N/cm	89 oz/in	Polypropylene (PP)

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### **Typical Performance Characteristics (continued)**

Backside 90° Peel Adhesion		Substrate
8.8 N/cm	80 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 L3 adhesive family is usable for short periods (minutes, hours) at temperatures up to 275°F (135°C) and for intermittent longer periods of time (days, weeks) up to 200°F (93°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 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**

	L3 + T3	L3 + T5
Adhesive Thickness (mm)	0.076	0.127
Liner Material	83# PCK	83# PCK

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#### Family Group (continued)

	L3 + T3	L3 + T5
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=L3 + 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.

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