



Technical Data Sheet

3M[™] Adhesive Transfer Tape 9447



Supersedes: June, 2024



Regulatory Info/SDS

Product Details

Product Description

3M[™] Adhesive Transfer Tape 9447 is specifically designed for use with 3M[™] Label Component Systems for protected graphics printing of polyester films. Also can be used in constructing custom tamper-indicating labels.

Product Features

• 3M[™] Adhesive 320 is used for general purpose applications and offers excellent flagging resistance and adhesion to a variety of substrates.

The liner provides an ideal surface for rotary die-cutting.
Adhesive has a temperature range of -40°F (-40°C) to 150°F (65°C) for days or weeks and to 250°F (121°C) for minutes or hours.

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 Value		
Adhesive Type	#320 "Hi-Tenacity" Acrylic		
Total Tape Thickness	ASTM D3652	0.025 mm (1 mil)	
Liner		55# Densified Kraft	
Liner Thickness		0.08 mm (3.2 mil)	

Typical Performance Characteristics

90° Peel Adhesion

Temperature: 23 °C (73 °F) Backing: 2 mil PET Test Method: ASTM D3330

Dwell Time	Substrate	Value	
20 min	Stainless Steel 3.1 N/cm (28 oz/in) ¹		
72 h	Polycarbonate (PC)	3.8 N/cm (35 oz/in) ¹	
72 h	Polypropylene (PP) 1 N/cm (9 oz/in) ¹		
72 h	Stainless Steel	Steel 3.7 N/cm (34 oz/in) ¹	

¹ 304 mm/min (12 in/min)

Attribute Name	Value
Short Term Temperature Resistance	121 °C (250 °F) ¹
Long Term Temperature Resistance	66 °C (150 °F) ²

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

Typical Environmental Performance

90° Peel Adhesion

Substrate: Aluminum

Dwell Time	Temperature	Environmental Condition	Value
1 h	23 °C (73 °F)	Freon TF	3.1 N/cm (28 oz/in) ¹
1 h	23 °C (73 °F)	MEK	2.6 N/cm (24 oz/in) 1
1 h	23 °C (73 °F)	Gasoline	2.2 N/cm (20 oz/in) ¹
4 h	23 °C (73 °F)	Weak Base (pH 10)	2.7 N/cm (25 oz/in) ¹
4 h	23 °C (73 °F)	Weak Acid (pH 4)	3.3 N/cm (30 oz/in) ¹
72 h	49 °C (120 °F)	Oil 10W30	4 N/cm (37 oz/in) 1
100 h	23 °C (73 °F)	Water	3.9 N/cm (36 oz/in) ¹
7 d	32 °C (90 °F)	90%RH	6.1 N/cm (56 oz/in) ¹
		Temperature Cycling: 4	
		Hours at 70 °C (158 °F). 4	
72 h		Hours at -29 °C (-20 °F). 16	4.4 N/cm (40 oz/in) ¹
		Hours at 23 °C (73 °F).	
		Repeat three times	

The properties defined are based on the attachment of impervious faceplate materials (such as polyester) to an aluminum test surface. 12 inches/minute (305 mm/min).

Processing

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For processing instructions, refer to the "Label Component System Process Guide."

Handling/Application Information

Application Examples

• Used to make tamper-indicating labels with Label Component System films and solutions. These labels may be used as seals for over-the-counter drugs, banking envelopes, non-transferable automobile inspection labels and a variety of other

applications.

• A component in the construction of labels with protected, or sub-surface printed graphics, used in harsh environments such as automotive under hood or outdoor environments.

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 an MSDS for these products which are not subjected 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, these products should not present a health and safety hazard. However, use or processing of the products in a manner not in accordance with the directions for use may affect their performance and present potential health and safety hazards. TSCA: These products are defined as articles under the Toxic Substances Control Act and therefore, are exempt from inventory listing requirements.

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

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

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