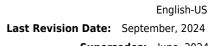




Technical Data Sheet

3M[™] Laminating Adhesive 9459W



Supersedes: June, 2024



Product Description

This laminating adhesive is pigmented to increase the opacity of sub-surface graphics printed labels.

Product Features

• Can be used when constructing custom tamper-indicating labels.

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	
Color		White	
Adhesive Type		#300 "Hi-Strength" Acrylic	
Total Tape Thickness	ASTM D3652	0.0375 mm (1.5 mil)	
Liner		55# Densified Kraft	
Liner Print		3M	
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 N/cm (27 oz/in) ¹		
72 h	Polycarbonate (PC)	3.7 N/cm (34 oz/in) ¹	
72 h	Polypropylene (PP)	2 N/cm (18 oz/in) ¹	
72 h	Stainless Steel 3.5 N/cm (32 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	70 °C (158 °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
4 h	23 °C (73 °F)	Weak Acid (pH 4)	3.4 N/cm (31 oz/in) 1
1 h	23 °C (73 °F)	Freon TF	3.5 N/cm (32 oz/in) 1
1 h	23 °C (73 °F)	МЕК	3 N/cm (27 oz/in) 1
4 h	23 °C (73 °F)	Weak Base (pH 10)	2.2 N/cm (20 oz/in) 1
1 h	23 °C (73 °F)	Gasoline	2.8 N/cm (26 oz/in) ¹
72 h	49 °C (120 °F)	Oil 10W30	4.2 N/cm (38 oz/in) ¹
100 h	23 °C (73 °F)	Water	3.6 N/cm (33 oz/in) ¹
7 d	32 °C (90 °F)	90%RH	3.6 N/cm (33 oz/in) 1
		Temperature Cycling: 4	
		Hours at 70 °C (158 °F). 4	
72 h		Hours at -29 °C (-20 °F). 16	4.6 N/cm (42 oz/in) ¹
		Hours at 23 °C (73 °F).	
		Repeat three times	

1 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).

Handling/Application Information

Application Examples

 A component in the construction of labels designed for harsh environments such as in automotive and outdoor applications.

• Used to make tamper-indicating labels with 3M custom filled and solution components. These labels may be used as seals for over-the counter drugs, nontransferable automobile parts labels, fire extinguisher serial number labels and a variety of other applications.

Industry Specifications

FDA Statement

This product might be suitable for use in indirect food contact applications. Please see the applicable Regulatory Data Sheet for more information relating to FDA compliance.

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.

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. Warranty claims must be made within one (1) year from the date of 3M's shipment.

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 is a trademark of 3M Company. $\hfill \ensuremath{\mathbb{C}}$ 3M 2024 (9/24)