



English-US **Last Revision Date:** September, 2024

Supersedes: June, 2024

Technical Data Sheet

3M™ High Performance Double Coated Tape 9086





Product Details

Regulatory Info/SD

Product Description

 $3M^{\text{TM}}$ Double Coated Tapes with $3M^{\text{TM}}$ Adhesive 375 provides a high level of adhesive peel and shear performance. The adhesive system used on these products provides good adhesion to both high and low surface energy substrates. The excellent initial tack ensures that a bond of good integrity is achieved soon after application.

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		Translucent
Adhesive Type		Modified Acrylic
Adhesive Carrier		Tissue
Total Tape Thickness	ASTM D3652	0.019 mm (7.5 mil)
Liner		Paper (Glassine)
Liner Thickness		0.07 mm (3 mil)
Primary Liner Color		White with Black 3M Logo

Typical Performance Characteristics

180° Peel Adhesion

Temperature: 23 °C (73 °F) Test Condition: Faceside

Dwell Time: 72 h

Backing: 2 mil Aluminum Foil Test Method: ASTM D3330

Substrate	Value
ABS	15 N/cm (137 oz/in) ¹
Glass	16 N/cm (146 oz/in) ¹
High Density Polyethylene (HDPE)	7 N/cm (68 oz/in) ¹
High Pressure Laminate	13 N/cm (119 oz/in) ¹
Polycarbonate (PC)	18 N/cm (162 oz/in) ¹
Stainless Steel	16 N/cm (146 oz/in) ¹

^{1 304} mm/min (12 in/min)

Static Shear

Test Method: ASTM D3654

Temperature	Test Condition	Value
23 °C (73 °F)	1000 g	10,000 min ¹
70 °C (158 °F)		10,000 min ¹

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

Attribute Name	Value
Short Term Temperature Resistance	120 °C (248 °F) ¹
Long Term Temperature Resistance	85 °C (185 °F) ²

- Short Term (minutes, hour)
- ² Long Term (day, weeks)

Attribute Name	Value
Plasticizer Resistance	Good ¹

It is suggested that an evaluation is conducted prior to use to ensure compatibility. Dwell of 10 days at 70 °C (158 °F) will usually accelerate any potential plasticizer problems. Plasticizers typically found in materials like PVC and some rubbers.

Typical Environmental Performance

Attribute Name	Value
Solvent Resistance	Good
UV Resistance	Excellent

Handling/Application Information

Application Examples

- POP Displays
- Plastic Extrusions
- Metal Fabrication
- Blister Packs and Packaging
- Sports Equipment
- Badge and Nameplates
- Indoor/Outdoor Signs
- Fabric and Leather Stitching
- Blind Manufacturers
- Print Finishing
- Furniture Trim
- Splicing

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 nurrhase price.

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. © 3M 2024 (9/24)