



Technical Data Sheet

3M[™] Double Coated Paper Tape 401M



Supersedes: June, 2024



Product Description

3M[™] Double Coated Paper Tape 401M utilizes a natural rubber adhesive system that offers good to excellent adhesion to many types of surfaces.

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	Value
Adhesive Family	860 (3M [™] Adhesive 860 is a soft natural rubber-resin
	pressure-sensitive adhesive system and features high
	initial adhesion and good holding power to a wide variety of
	materials.)

Attribute Name	Test Method	Value
Color		Off-White
Adhesive Carrier		Treated Paper
Total Tape Thickness	ASTM D3652	0.23 mm (9 mil)
Liner		Paper
Liner Print		Green Plaid
Liner Thickness		0.075 mm (3 mil)
Primary Liner Color		Green Plaid

Typical Performance Characteristics

90° Peel Adhesion

Substrate: Stainless Steel Temperature: 23 °C (73 °F) Dwell Time: 72 h Backing: 2 mil PET Test Method: ASTM D3330

Value

|--|

7.1 N/cm 1

¹ 304 mm/min (12 in/min)

Attribute Name	Value
Short Term Temperature Resistance	82 °C (180 °F) ¹
Long Term Temperature Resistance	66 °C (150 °F) ²

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

Typical Environmental Performance

Attribute Name	Value
Solvent Resistance	Medium
UV Resistance	Good

Typical Environmental Characteristics

Environmental Resistance

This product uses a solvent free manufacturing process.

Handling/Application Information

Application Examples

- Splicing and core starting of papers, foils, films, fabrics etc.
- Mounting rubber or photopolymer printing plates to print cylinders.
- Attaching of golf club grips.
- Temporary holding while parts are being finished in the milling process.

Application Techniques

Bond strength is dependent upon the amount of adhesive-to-surface contact. Firm application pressure helps ensure better adhesive contact and improve bond strength. To obtain optimum adhesion, the bonding surfaces must be clean, dry, and uniform. 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.

*Note: When using solvents, extinguish all ignition sources, including pilot lights, and follow the manufacturer's precautions and directions for use.

Application Equipment

For additional dispenser information, contact your local 3M sales representative, or the toll free 3M sales assistance number at 1-800-362-3550.

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 18 months from date of manufacture.

Available Sizes - Detailed

Please contact your 3M sales representative or contact 3M customer service at 1-800-362-3550 for details on available sizes.

Recognition/Certification

MSDS: 3M has not prepared MSDSs for these products which are not subject 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

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.

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.

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, 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)