



Technical Data Sheet

3M™ Double Coated Urethane Foam Tape
4032



[Product Details](#)



[Regulatory Info/SDS](#)

Product Description

3M™ Double Coated Urethane Foam Tapes are conformable foams that offer high shear strength with a high temperature holding acrylic adhesive system for bonding to various types of surfaces for mounting, joining and holding.

Product Features

- The natural colored urethane foam tape products vary in color from white to light yellow. The color will change to light yellow upon exposure to sunlight (ultraviolet radiation). This color change is normal and does not affect tape performance.

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
Color	Natural
Adhesive Type	100
Foam Density	320 kg/m ³ (20 lb/ft ³)
Adhesive Carrier	Polyurethane Foam

Attribute Name	Value
Thickness Tolerance	0.64 to 1.02 mm (25 to 40 mil)
Thickness: Nominal	0.8 mm (31 mil)
Liner Thickness	0.08 mm (3 mil)
Primary Liner Color	Green Plaid

Typical Performance Characteristics

Static Shear

Temperature	Value
22 °C (72 °F)	2,000 g
49 °C (120 °F)	1,500 g
66 °C (150 °F)	1,000 g
93 °C (200 °F)	1,050 g

Substrate: Aluminum
Temperature: 22 °C (72 °F)
Dwell Time: 72 h

Attribute Name	Test Method	Value
Normal Tensile	ASTM D897	414 kPa (60 lb/in ²) ¹

¹ 1 in.² (6.45 cm²), Jaw Speed 2 in./min. (50 mm/min.)

Attribute Name	Temperature	Value
Short Term Temperature Resistance		193 °C (380 °F) ¹
Long Term Temperature Resistance		104 °C (220 °F) ²
Cold Flex	-30 °C (-20 °F)	No cracking when flexed around a 1/4 in (6.4 mm mandrel).

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

Attribute Name	Value
Elongation at Break	90 %
Tensile Strength	1655 kPa (240 lb/in ²)

Typical Environmental Performance

Attribute Name	Value
Solvent Resistance	No apparent degradation when exposed to splash tests of most hydrocarbon solvents.
UV Resistance	No apparent degradation when exposed to 7 days in U.V. chamber.

Electrical and Thermal Properties

Attribute Name	Test Method	Value
Dielectric Strength	ASTM D149	8 to 12 V/μm
Thermal Conductivity		0.062 W/m/K (0.036 (btu-in)/(h-ft ² -°F))

Handling/Application Information

Application Examples

The urethane foam tapes are generally ideal for interior applications or for exterior applications where the tape will be protected from the environment. The urethane foam is open cell.

3M™ Double Coated Urethane Foam Tape 4032 – Attach wire clips to various surfaces

Application Techniques

- Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and improve bond strength.

- To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Typical surface cleaning solvents are isopropyl alcohol* and water (rubbing 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: Be sure to follow the manufacturer's precautions and directions for use when using solvents.

Storage and Shelf Life

Store in original cartons at 70°F (21°C) and 50% relative humidity.

To obtain best performance, use these products within 24 months from date of manufacture.

Available Sizes

Attribute Name	Value
Available Width	1168 mm (46 in)
Maximum Length	160 m (175 yd)
Normal Slitting Tolerance	±0.8 mm (±1/32 in)
Note	Subject to Minimum Order Requirements
Standard Roll Length	65.8 m (72 yd)

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 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), 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 Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-35-06
St. Paul, MN 55144-1000
800-362-3550

3M is a trademark of 3M Company.
©3M 2022 (5/22)