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English-EU

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Technical Data Sheet

3M™ Double Coated Urethane Foam Tape 4032

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/m³
Adhesive Carrier	Polyurethane Foam

Attribute Name	Value
Thickness Tolerance	0.64 — 1.02 mm
Thickness: Nominal	0.8 mm
Liner Thickness	0.08 mm
Primary Liner Color	Green Plaid

Typical Performance Characteristics

Static Shear

Temperature	Value
23 °C	2,000 g
49 °C	1,500 g
66 °C	1,000 g
93 °C	1,050 g

Substrate: Aluminum
Temperature: 23 °C
Dwell Time: 72 h

Attribute Name	Test Method	Value
Normal Tensile	ASTM D897	414 kPa [1]

[1] 6.45 cm² (1 in²), Jaw Speed 51 mm/min (2 in/min)

Attribute Name	Temperature	Value
Short Term Temperature Resistance		193 °C [1]
Long Term Temperature Resistance		104 °C [2]
Cold Flex	-30 °C	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

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 — 12 V/µm
Thermal Conductivity		0.062 W/m/K

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 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.

Available Sizes

Attribute Name	Value
Available Width	1168 mm
Maximum Length	160 m
Normal Slitting Tolerance	±0.8 mm
Note	Subject to Minimum Order Requirements
Standard Roll Length	65.8 m

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

Precautionary Information: Refer to product label and Material Safety Data Sheet for health and safety information before using the product. For information, please contact your local 3M Office. You can click or scan QR code to see contact detail or visit www.3M.com Important Information: All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law. Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.

ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

3M™ Centre
Cain Rd, Binfield, Bracknell RG12 8HT, United Kingdom
3m.co.uk/iatd