

Technical Data Sheet

3M™ Double Coated Urethane Foam Tape 4008

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

Property	Values	Additional Information
Adhesive Type	100	
Adhesive Carrier	Polyurethane Foam	
Color	Natural	
Liner Color	Green Plaid	View 
Test Name: Primary		
Liner Thickness	0.08 mm	
Thickness: Nominal	3.2 mm	
Thickness Tolerance	2.79 to 3.81 mm	
Thickness: Nominal	125 mil	


Liner Thickness	3 mil
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Thickness Tolerance	110 to 150 mil
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Foam Density	240 kg/m³
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Foam Density	15 lb/ft³
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Typical Performance Characteristics

Property	Values	Additional Information
Normal Tensile	170 kPa	View 


Notes: (“T” Block); 1 in² (6.45 cm²); Jaw Speed 2 in/min (50 mm/min)


Normal Tensile	25 lb/in²	View 
Notes: (“T” Block); 1 in² (6.45 cm²); Jaw Speed 2 in/min (50 mm/min)		


Tensile Strength	1100 kPa
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Tensile Strength	160 lb/in²
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Elongation at Break	90 %
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Short Term Temperature Resistance	380 °F	View 
Test Condition: Short Term (minutes, hour)		

Short Term Temperature Resistance	193 °C	View 
Test Condition: Short Term (minutes, hour)		

Long Term Temp C	104 °C	View 
Test Condition: Long Term (day, weeks)		

Long Term Temp F	220 °F	View 
Test Condition: Long Term (day, weeks)		

Static Shear	1000 g	View 
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Test Condition: Room Temperature

Static Shear	500 g	View	^
Test Condition: 49°C (120°F)			
Static Shear	500 g	View	^
Test Condition: 66°C (150°F)			
Static Shear	250 g	View	^
Test Condition: 93°C (200°F)			
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.		
Cold Flex	No cracking when flexed around a 1/4 in (6.4 mm mandrel).	View	^
Temp C: -30C Temp F: -20F			

Available Sizes

Property	Values	Additional Information
Note	Subject to Minimum Order Requirements	
Standard Roll Length	32.9 m	
Standard Roll Length	36 yd	
Maximum Length	45.7 m	
Maximum Length	50 yd	
Available Width	1168 mm	

Available Width	46 in
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Normal Slitting Tolerance	±0.8 mm
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Normal Slitting Tolerance	±1/32 in
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Electrical and Thermal Properties

Property	Values	Additional Information
Dielectric Strength	8 to 12 V/μm	

Thermal Conductivity	0.062 W/m/K
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Thermal Conductivity	0.036 (btu-in)/(h-ft²-°F)
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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.

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.

Bottom Matter

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Trademarks

3M is a trademark of 3M Company.

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 4008 – Bond acoustic panels to walls

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.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40067228/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=4008

ISO Statement

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

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