

October, 2006

3M™ Double Coated Tape 9832HL

Product Description

Finite Element Analysis (FEA) data is available for this product at: 3m.com/FEA

3M™ Double Coated Tape 9832 with Adhesive 300MP is a general purpose tape that provides excellent adhesion to a wide variety of substrates, including many foams, plastics, foil, and felt. This tape is well suited for applications requiring temperature performance up to 250°F for short term exposure and up to 150°F for long term exposure. A thin polyester film carrier provides dimensional stability and improved handling. 3M tape 9832 can be used in the woodworking market on particle board, melamine, HPL, wood, plywood, vinyl, foam and more.

Product Features

- 3M™ Adhesive 300MP is a solvent free acrylic adhesive ideal for applications requiring high adhesion to a wide variety of materials, including many plastics and foams.
- Has a film carrier, which can add dimensional stability to foams and other substrates. The carrier also provides easier handling during slitting and diecutting.
- 3M™ Double Coated Tape 9832HL has a heavy 83# Polycoated Kraft liner.



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		Attribute Modifier
Total Tape Thickness without liner	0.12 mm	4.8 mil	
Carrier Thickness	0.013 mm	0.5 mil	
Liner	83# Polycoated Kraft		
Liner Color	Tan		Primary
Liner Thickness	0.16 mm	6.2 mil	

Adhesive Thickness		Attribute Modifier	Notes
0.051 mm		Backside	The caliper listed is based on a calculation from manufacturing controlled adhesive coat weight. While past data pages have listed nominal thicknesses of 1 and 2 mils, the coat weight (and theoretical caliper) has not changed.
2 mil		Backside	Backside adhesive is on the exterior of the roll, exposed when liner is removed.
0.058 mm	2.3 mil	Faceside	Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.

Property: Adhesive Thickness

Typical Performance Characteristics

90° Peel Adhesion		Dwell/Cure Time	Dwell Time Units	Temp C	Temp F	Substrate	Notes
6.1 N/cm		15	min	22C	72F	Stainless Steel	
56 oz/in		15	min	22C	72F	Stainless Steel	12 in/min (300 mm/min)
6.3 N/cm	58 oz/in	72	hr	22C	72F	Stainless Steel	12 in/min (300 mm/min)
9.4 N/cm	86 oz/in	72	hr	70C	158F	Stainless Steel	12 in/min (300 mm/min)
6.3 N/cm	58 oz/in	72	hr	22C	72F	ABS	12 in/min (300 mm/min)
3.7 N/cm	34 oz/in	72	hr	22C	72F	Polypropylene (PP)	12 in/min (300 mm/min)

Table continued on next page

Typical Performance Characteristics (continued)

90° Peel Adhesion		Dwell/Cure Time	Dwell Time Units	Temp C	Temp F	Substrate	Notes
7.2 N/cm	66 oz/in	72	hr	22C	72F	Polycarbonate (PC)	12 in/min (300 mm/min)

Property: 90° Peel Adhesion
Method: ASTM D3330
Environmental Condition: 52%RH
Backing: 2 mil Aluminum Foil

Property	Values		Test Condition	Method	Notes	Dwell Time	Dwell Time Units	Temp C	Temp F	Environmental Condition	Substrate	Backing
Relative High Temperature Operating Ranges	250 °F		Short Term (minutes, hours)									
Relative High Temperature Operating Ranges	150 °F		Long Term (days, weeks)									
Static Shear	2289 min		1000 g @ Room Temperature	ASTM D3654	0.5 in² sample size							
Static Shear	1139 min		500 g @ Room Temperature	ASTM D3654	0.5 in² sample size							
180° Peel Adhesion	10.3 N/cm	94 oz/in		ASTM D3330	12 in/min (300 mm/min)	72	hr	22C	72F	52%RH	Stainless Steel	Aluminum Foil

3M™ Double Coated Tape 9832HL

Handling/Application Information

Application Ideas

- General purpose foam lamination.
 - General purpose lamination for fabricated parts.
- 3M™ Double Coated Tape 9832 application ideas for woodworking:
- Edge banding.
 - Refacing cabinets.
 - Applying wood veneer.
 - Drawer front mounting.
 - Mounting card holders.
 - Creating jigs.

Application Techniques

Bond strength is dependent upon the amount of adhesive to surface contact. Firm application pressure to the adhesive is needed to ensure adhesive wet out and improves bond strength.

To obtain optimum adhesion, the bonding surfaces must be clean and dry.

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.

Application Equipment

Wide web lamination

To apply adhesives in a wide web format, lamination equipment is required to ensure acceptable quality. To learn more about working with pressure-sensitive adhesives please refer to technical bulletin, Lamination Techniques for Converters of Laminating Adhesives (70-0704-1430-8).

Storage and Shelf Life

Store in original cartons at 70°F (21°C) and 50% relative humidity. Keep out of direct sunlight.

If stored under proper conditions, product retains its performance and properties for 24 months from date of manufacture.

Trademarks

3M is a trademark of 3M Company.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/company-us/all-3m-products/~ /3M-Double-Coated-Tape-9832HL?N=5002385+3293241796&rt=rud
Safety Data Sheet (SDS)	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=9832HL

ISO Statement

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

Recognition/Certification

MSDS: 3M has not prepared a MSDS 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 these 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.

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.

