

3M

Hot Melt Adhesive

3750LM • 3750

Technical Data

July, 2016

Product Description	<p>3M™ Hot Melt Adhesives are heat applied, 100% solids adhesives. They are fast setting thermoplastic adhesives with good “hot tack” and low to medium viscosity.</p> <p>3M™ Hot Melt Adhesives bond to a wide variety of substrates such as corrugated, beadboard, repacking chipboard, recouperage, wood and many other lightweight materials.</p> <p>3M™ Hot Melt 3750 Tan Low viscosity adhesive for high flow rate and increased production rate. Ideal for high volume packaging. Use with AE II applicator only.</p> <p>3M™ Hot Melt 3750 Clear General purpose adhesive with high peel strength. Use with AE II applicator only</p> <p>3M™ Hot Melt 3750LM Low temperature application version with a fast set time. Use with AEII LT applicator only.</p>
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Features	<ul style="list-style-type: none"> • 100% solids, no VOCs • Easy to use • Fast-setting adhesive obtains strength in seconds • Low Melt (LM) adhesives are designed for low temperature application and heat sensitive substrates • “Quick grab” for instant adhesion that cools to a tack free solid • Ideal for packaging and many woodworking applications.
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Typical Physical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

	3M™ Hot Melt Adhesive		
	3750LM	3750 Tan	3750 Clear
Color (solid)	Tan	Tan	Clear
Density (g/cm³)	1.01	0.93	0.93
Flashpoint (°F)	560	>390	>530

Directions for Use

- Application:** 3M™ Hot Melt Adhesives are designed for use with 3M™ Hot Melt Applicators (excluding bulk sizes). 3M™ Hot Melts are applied at 350-385°F, except the LM series which are designed to be applied at 250-275°F. Read and follow the precautions and directions for use in the Applicators User’s Manual before operating the applicator.

Open Time is the maximum amount of time between dispensing adhesive and joining surfaces. Reported open time are based on 1/8” extruded beads and will vary based on bead size, dispense temperature and ambient temperature.

Extruded bead sizes can be customized using 3M™ applicator tips.

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Directions for Use (continued)

2. **Coverage:** 3M™ Hot Melt Adhesives yield approximately 430 linear feet per pound of adhesive when extruded as a 1/8" diameter semi-circular bead.
3. **Set Time:** After the bond is made, 3M™ Hot Melt Adhesives immediately build strength and no clamping is necessary. Set will occur faster on cold or metallic substrates.

Typical Application Properties

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	3M™ Hot Melt Adhesive		
	3750LM	3750 Tan	3750 Clear
Application Temperature¹	250-270°F/ 121-132°C	350-385°F/ 177-196°C	350-385°F/ 177-196°C
Viscosity (cps)²	4000 @ 250°F	1900 @ 375°F	4800 @ 375°F
Open Time (seconds)³	25	30	40
Delivery Time (seconds)⁴	45	30-40	35-45
Available sizes/forms	1/2"x12"AE	1/2"x12"AE	1/2"x10"AE

- (1) Recommended application temperature range. Temperature can be adjusted to regulate desired viscosity, delivery rate and pot life
- (2) Brookfield Thermocel Viscometer in Centipoise using a #27 Spindle @ 10 RPM.
- (3) For 1/8" semicircular bead, Douglas Fir to Douglas Fir
- (4) Extrusion time for one 1"x3" PG cartridge

Typical Performance Properties

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	3M™ Hot Melt Adhesive		
	3750LM	3750 Tan	3750 Clear
Heat Resistance¹	128°F/ 54°C	125°F/ 52°C	135°F/ 57°C
Ball & Ring Melt Point²	200°F/ 95°C	200°F/ 93°C	178°F/ 81°C
Shear Strength³	475 psi	500 psi	250 psi
Peel Strength⁴	6 pwi	6 pwi	12 pwi
UL94 Listing	n/a	n/a	n/a
FDA Indirect Food Contact⁵	21 CFR 175.105	n/a	n/a

- (1) Highest temperature that the adhesive will support a 2 psi dead load
- (2) ASTM E28-67
- (3) Douglas Fir to Douglas Fir
- (4) Canvas to Douglas Fir
- (5) Permitted for indirect food contact subject to the limitations in applicable CFR section(s)

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Storage	Store product below 120°F (49°C).
Shelf Life	When stored at the recommended conditions, this product has a shelf life of 2 years after 3M ships the product to a customer or distributor.
Pre cautionary Information	Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501
Product Use	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 of application.
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Limitation of Liability	Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

ISO 9001:2000

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001: 2000 standards.



Industrial Adhesives and Tapes Division

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