

Technical Data Sheet

3M™ Hot Melt Adhesive 3750 Tan



Product Details



Regulatory Info/SDS

Product Description

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.

3M™ Hot Melt Adhesives bond to a wide variety of substrates such as corrugated, beadboard, repacking chipboard, recoupage, wood and many other lightweight materials.

- Low viscosity adhesive for high flow rate and increased production rate. Ideal for high volume packaging. Use with AE II applicator only.

Product Features

- 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.

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	Temperature	Substrate	Value
Color			Tan
Density			0.93 g/cm ³ (0.034 lb/in ³)
Open Time		Douglas Fir to Douglas Fir	30 s ¹
Flash Point			199 °C (>390 °F)
Delivery Time			30 — 40 s ²
Viscosity	191 °C (375 °F)		1,900 cP ³

¹ 3 mm (1/8 in) semicircular bead

² Extrusion time for one 25 x 76 mm (1 x 3 in) PG cartridge.

³ Brookfield Thermocel Viscometer in Centipoise using a #27 Spindle @ 10 RPM.

Typical Performance Characteristics

Attribute Name	Test Method	Temperature	Substrate	Value
180° Peel Adhesion		23 °C (73 °F)	Flexible canvas bonded to Douglas Fir	96 oz/in
Overlap Shear Strength		23 °C (73 °F)	Douglas Fir	500 lb/in ²
Ball & Ring Melt Point	ASTM E28-67			93 °C (200 °F)

Attribute Name	Value
Application Temperature	177 — 196 °C (350 — 385 °F) ¹
Temperature Resistance	52 °C (125 °F) ²

¹ Recommended application temperature range. Temperature can be adjusted to regulate desired viscosity, delivery rate and pot life.

² Highest temperature that the adhesive will support a 14 kPa (2 psi) dead load

Handling/Application Information

Directions for Use

1. 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.
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.

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 - Detailed

1/2 in x12 in AE

Precautionary 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

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. Warranty claims must be made within one (1) year from the date of 3M's shipment.

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

3M™ Industrial Adhesives and Tapes Division
3M Center, St. Paul, MN 55144-1000
3M.com/iatd

3M is a trademark of 3M.
©3M 2024 (9/24)