

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 1/8" semicircular bead

² Extrusion time for one 1"x3" 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 | | 22 °C (72 °F) | Flexible canvas bonded to Douglas Fir | 96 oz/in |
| Overlap Shear Strength | | 22 °C (72 °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 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

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ISO Statement

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

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