

**Technical Data Sheet** 

3M<sup>™</sup> Hot Melt Adhesive 3750 Clear

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# **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,

recouperage, wood and many other lightweight materials.

• General purpose adhesive with high peel strength. 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			Clear
Density			0.93 g/cm³ (0.034 lb/in³)
Open Time		Douglas Fir to Douglas Fir	40 s ¹
Flash Point			277 °C (>530 °F)
Delivery Time			35 — 45 s <sup>2</sup>
Viscosity	191 °C (375 °F)		4,800 cP <sup>3</sup>

<sup>1/8&</sup>quot; semicircular bead

# **Typical Performance Characteristics**

Attribute Name	Test Method	Temperature	Substrate	Value
180° Peel Adhesion		22 °C (72 °F)	Flexible canvas	192 oz/in
			bonded to Douglas Fir	
Overlap Shear		22 °C (72 °E)	2 °C (72 °F) Douglas Fir	250 lb/in²
Strength		22 C(/2 F)		
Ball & Ring Melt Point	ASTM E28-67			81 °C (178 °F)

Attribute Name	Value	
Application Temperature	177 — 196 °C (350 — 385 °F) ¹	
Temperature Resistance	57 °C (135 °F) <sup>2</sup>	

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

<sup>&</sup>lt;sup>2</sup> Extrusion time for one 1"x3" PG cartridge.

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

<sup>&</sup>lt;sup>2</sup> Highest temperature that the adhesive will support a 2 psi dead load

# **Handling/Application Information**

#### **Directions for Use**

- 1. Application: 3M<sup>™</sup> Hot Melt Adhesives are designed for use with 3M<sup>™</sup> Hot Melt Applicators (excluding bulk sizes). 3M<sup>™</sup> 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<sup>™</sup> 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.
- 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 x10 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**

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