



Technical Data Sheet

3M™ Hot Melt Adhesive 3792



[Product Details](#)



[Regulatory Info/SDS](#)

Product Description

3M™ Hot Melt Adhesives are 100% solids, thermoplastic resins that become fluid when heated and quickly wet the bonding surface. They cool, harden and reach bond strength in seconds, keeping production flowing by eliminating clamps, fixturing and drying, and saving time energy and space.

3M™ Hot Melt 3792 is a thermoplastic adhesive with low to medium viscosity and long open times. It bonds to wide a variety of substrates such as wood, plain and coated corrugated, sand cores, foams, many plastics, and other lightweight materials.

- Low viscosity and long open time for high flow rates, thin bonds, and repositionability.

Product Features

- 100% Solids, no VOCs
- Easy to use
- Long open times allow for ease use on large assemblies and large surfaces
- Adhesive sets and obtains strength in seconds
- Low Melt (LM) adhesives are designed for low temperature application and heat sensitive substrates
- Ideal for woodworking and general industrial 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	Test Method	Temperature	Substrate	Value
Color				Clear
Density				0.95 g/cm ³ (0.034 lb/in ³)
Open Time			OSB	50 s ¹
Flash Point	ASTM D92-72			>232 °C (>450 °F) ²
Delivery Time				45 s ³
Viscosity		191 °C (375 °F)		5,000 cP ⁴

¹ Open time is the max time between the application of the adhesive and joining the parts. Data based on 1/8in semicircular bead on non-metallic substrates at 75°F. Higher environmental temperatures and/or larger beads will lengthen open times.

² Cleveland Open Cup

³ Extrusion time for one 1"x3" PG cartridge.

⁴ 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	208 oz/in
Overlap Shear Strength		22 °C (72 °F)	Douglas Fir	250 lb/in ²
Ball & Ring Melt Point	ASTM E28-67			81 °C (179 °F)

Attribute Name	Value
Application Temperature	177 to 196 °C (350 to 385 °F) ¹
Temperature Resistance	60 °C (140 °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. Surface Preparation: Surfaces must be clean, dry and dust free. Wipe with a solvent such as isopropyl alcohol for plastic substrates to aid in removing oil and dirt.*

*Note: When using solvents, extinguish all ignition sources, including pilot lights, and follow the manufacturer's precautions and directions for use.

2. Application: 3M™ Hot Melt Adhesives are designed for application with a 3M™ Hot Melt Applicators. Read and follow the precautions and directions for use in the user's manual before operating the applicator. 3M™ Hot Melt Adhesives are applied at 350-385°F, except the Low Melt (LM) series which are designed to be applied at 250-275°F. LM series are adhesives designed for lower temperature application but still yield long-lasting bonds. Extruded bead sizes can be customized using 3M™ applicator tips.

3. Coverage: 3M™ Hot Melt Adhesives yield approximately 430 linear feet per pound of adhesive when extruded as a 1/8" diameter semi-circular bead.

4. Set up 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.

Industry Specifications

UL 94 - V2

Storage and Shelf Life

Store below 120°F (49°C).

When stored at the recommended conditions, this product has a shelf life of 24 months from the date of manufacture.

Available Sizes - Detailed

5/8 in x8 in Q
 5/8 in x2 in TC
 1 in x3 in PG
 1/2 in x12 in AE
 1/8 in Bulk

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 or (651) 737-6501.

Information

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ISO Statement

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

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