

Technical Data Sheet

3M™ Hot Melt Adhesive 3789



Product Description

3M™ Hot Melt Adhesives are heat applied, 100% solids adhesives. 3M™ Hot Melt 3789 is a thermoplastic adhesive to bond to wide variety of substrates such as wood, plastic, vinyl, metal and glass.

- High performance for plastic with good fuel, oil and plasticizer resistance. Long open time.

Product Features

- 100% solids, no VOCs
- Easy to use
- Long open times allow for easy use on large assemblies and large surfaces
- Adhesive sets and obtains strength in seconds
- Creates high performance bonds
- 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

Property	Values	Additional Information
Open Time	50 s	View

Substrate: OSB

Notes: 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.

Density	0.95 g/cm ³	
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Density	0.034 lb/in ³	
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Flash Point	>200 °C	View
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Test Method: ASTM D92-72

Notes: Cleveland Open Cup

Flash Point	>392 °F	View
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Test Method: ASTM D92-72

Notes: Cleveland Open Cup

Viscosity	5200 cP	View 
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Notes: Brookfield Thermocel Viscometer in Centipoise using a #27 Spindle @ 10 RPM.

Delivery Time	70 s	View 
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Notes: Extrusion time for one 1"x3" PG cartridge.

UL Listing	UL 94 - V2	
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Typical Uncured Physical Properties

Property	Values	Additional Information
Color (solid)	Brown	


Typical Performance Characteristics

Property	Values	Additional Information
180° Peel Adhesion	256 oz/in	View 


Substrate: Flexible canvas bonded to Douglas Fir

Application Temperature C	177 to 196 °C	View 
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Notes: Recommended application temperature range. Temperature can be adjusted to regulate desired viscosity, delivery rate and pot life.

Application Temperature F	350 to 385 °F	View 
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Notes: Recommended application temperature range. Temperature can be adjusted to regulate desired viscosity, delivery rate and pot life.

Overlap Shear Strength	570 lb/in ²	View 
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Substrate: Douglas Fir

Temperature Resistance	104 °C	View 
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Notes: Highest temperature that the adhesive will support a 2 psi dead load

Temperature Resistance	220 °F	View 
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Notes: Highest temperature that the adhesive will support a 2 psi dead load

Ball & Ring Melt Point	132 °C	View 
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Test Method: ASTM E28-67

Ball & Ring Melt Point	270 °F	View 
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Test Method: ASTM E28-67

FDA Indirect Food Contact

21 CFR 175.105

View 

Notes: Permitted for indirect food contact subject to the limitations in applicable CFR section(s).

Available Sizes

5/8 in x8 in Q

1 in x3 in PG

1/8 in Bulk

Storage and Shelf Life

Store product below 120°F (49°C).

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

Industry Specifications

UL 94 - V2

Bottom Matter

3M

Industrial Adhesives and Tapes Division

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Trademarks

3M is a trademark of 3M.

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, metal and glass substrates to remove 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. Adhesives yield approximately 430 linear feet per pound of adhesive when extruded as a 1/8" diameter semi-circular bead. 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.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40065547/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?

Family Group

Link Tags:

• 3747

• 3779

• 3789

• 3797

Products	Open Time
3747	N/A
3797	N/A
3789	50 s
3779	N/A

ISO Statement

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

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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