

Technical Data Sheet

3M™ Hot Melt Adhesive 3747

Product Description

3M™ Hot Melt Adhesives are heat applied, 100% solids adhesives. 3M™ Hot Melt 3747 is a thermoplastic adhesive to bond to wide variety of substrates such as wood, plastic, vinyl, metal and glass.

- General purpose adhesive for bonding dissimilar substrates such as wood to plastic, fabric to metal.

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	45 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	0.97 g/cm ³	
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Density	0.035 lb/in ³	
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Flash Point	265 °C	View
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Test Method: ASTM D92-72

Notes: Cleveland Open Cup


Flash Point	509 °F	View
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Test Method: ASTM D92-72

Notes: Cleveland Open Cup

Viscosity	4100 cP	View 
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Notes: Brookfield Thermocel Viscometer in Centipoise using a #27 Spindle @ 10 RPM.


Delivery Time	45 s	View 
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Notes: Extrusion time for one 1"x3" PG cartridge.

Typical Uncured Physical Properties

Property	Values	Additional Information
Color (solid)	Tan	

Typical Performance Characteristics

Property	Values	Additional Information
180° Peel Adhesion	320 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	430 lb/in ²	View 
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Substrate: Douglas Fir

Temperature Resistance	63 °C	View 
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Notes: Highest temperature that the adhesive will support a 2 psi dead load

Temperature Resistance	145 °F	View 
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Notes: Highest temperature that the adhesive will support a 2 psi dead load

Ball & Ring Melt Point	104 °C	View 
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Test Method: ASTM E28-67

Ball & Ring Melt Point	220 °F	View 
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Test Method: ASTM E28-67

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

Available Sizes

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

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.

Bottom Matter

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-362-3550

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/b40065539/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=3747

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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