English-US

Last Revision Date: September, 2024

Supersedes: July, 2024

Technical Data Sheet

3M™ Hot Melt Adhesive 3764

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 Adhesive 3764 bonds to a wide variety of substrates such as wood, plain and coated corrugated, fabrics and foams, plastics, and other lightweight materials.
• Excellent general plastics bonder with low temperature flexibility.

Product Features

• 100% solids, no VOCs
• Easy to use
• Adhesive obtains strength in seconds
• Designed for plastics and polyolefin bonding, including ABS, PVC, polycarbonate, polypropylene and polyethylene

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/cm³ (0.034 lb/in³)
Open Time			OSB	40 s [1]
Flash Point	ASTM D92-72			268 °C (514 °F) [2]
Delivery Time				55 s [3]
Viscosity		191 °C (375 °F)		6,000 cP [4]

[1] Open time is the max time between the application of the adhesive and joining the parts. Data based on 3.2 mm (1/8 in) semicircular bead on non-metallic substrates at 24 °C (75 °F). Higher environmental temperatures and/or larger beads will lengthen open times.

[2] Cleveland Open Cup

[3] Extrusion time for one 25 x 76 mm (1 x 3 in) 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		23 °C (73 °F)	Flexible canvas bonded to Douglas Fir	25 N/cm (224 oz/in)
Overlap Shear Strength		23 °C (73 °F)	Douglas Fir	27 kg/cm² (390 lb/in²)
Ball & Ring Melt Point	ASTM E28-67			88 °C (190 °F)

Attribute Name	Value
Application Temperature	177 — 196 °C (350 — 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 14 kPa (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.
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

4. 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.

Industry Specifications

UL 94 - V2

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

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

Information

ISO Statement

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

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