



**Adhesive  
Solutions**

GROUP OF COMPANY

R/O- Plot No. 120,A Block First Floor, Qutub Vihar Phase-1, Near Sec-19, Dwarka, New Delhi-110071  
M- +91 9871417131, +91 8376920360 , E-admin@adhesivesolutions.in ,  
Web- www.adhesivesolutions.in

# 3M Hot Melt Adhesive

3764 • 3748

**Technical Data**

**July, 2016**

**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 and 3748 bond to a wide variety of substrates such as wood, plain and coated corrugated, fabrics and foams, plastics, and other lightweight materials.

**3M™ Hot Melt Adhesive 3764**

Excellent general plastics bonder with low temperature flexibility.

**3M™ Hot Melt Adhesive 3748**

Designed especially for low surface energy plastics and coatings such as polyolefins. Good high temperature stability and thermal shock resistance.

**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

**Typical Physical Properties**

**Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.**

	3M™ Hot Melt Adhesive	
	3764	3748
<b>Color (solid)</b>	Clear	Off White
<b>Density (g/cm<sup>3</sup>)</b>	0.95	0.93
<b>Flashpoint (°F)<sup>1</sup></b>	514	536

(1) Cleveland Open Cup ASTM D92-72

## 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.

**1. 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.

Adhesive Solutions

# 3M™ Hot Melt Adhesive

3764 • 3748

## Directions for Use (continued)

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

**3. 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.

## Typical Application Properties

**Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.**

	3M™ Hot Melt Adhesive	
	3764	3748
<b>Application Temperature<sup>1</sup></b>	350-385°F/ 177-196°C	350-385°F/ 177-196°C
<b>Viscosity (CPS)<sup>2</sup></b>	6,000 @ 375°F	5,000 @ 375°F
<b>Open Time (seconds)<sup>3</sup></b>	40	45
<b>Delivery Time (seconds)<sup>4</sup></b>	55	65
<b>Available sizes/forms</b>	5/8"x8"Q 5/8"x2" TC 1"x3" PG 1/2"x12"AE 1/8" Bulk	5/8"x8"Q 5/8"x2" TC 1"x3" PG Bulk

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

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

(3) Open time is the maximum time between the application of the adhesive and when the parts must be joined together. Data based on 1/8" semicircular bead on non-metallic substrates at 75°F. Higher environmental temperatures and/or larger beads will lengthen open times.

(4) Extrusion time for one 1"x3" PG cartridge.

## Typical Performance Properties

**Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.**

	3M™ Hot Melt Adhesive	
	3764	3748
<b>Heat Resistance<sup>1</sup></b>	140°F/ 60°C	175°F/ 79°C
<b>Ball &amp; Ring Melt Point<sup>2</sup></b>	190°F/ 88°C	292°F/ 144°C
<b>Shear Strength<sup>3</sup></b>	390 psi	250 psi
<b>Peel Strength<sup>4</sup></b>	14 pwi	18 pwi
<b>UL94 Listing</b>	V2	V2
<b>FDA Indirect Food Contact<sup>5</sup></b>	21 CFR 175.105	21 CFR 175.105

(1) Highest temperature that the adhesive will support a 2 psi dead load.

(2) ASTM E28-67.

(3) Douglas Fir to Douglas Fir.

(4) Canvas to Douglas Fir.

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

# 3M™ Hot Melt Adhesive

3764 • 3748

---

**Storage** Store product below 120°F (49°C).

---

**Shelf Life** When stored at the recommended conditions, this product has a shelf life of 2 years after 3M ships the product to a customer or distributor.

---

**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

---

**Product Use** All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

---

**Warranty and Limited Remedy** Unless stated otherwise in 3M's product literature, packaging inserts or product packaging for individual products, 3M warrants that each 3M product meets the applicable specifications at the time 3M ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If the 3M product is defective within the warranty period, your exclusive remedy and 3M's and seller's sole obligation will be, at 3M's option, to replace the product or refund the purchase price.

---

**Limitation of Liability** Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

**ISO 9001: 2000**

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001: 2000 standards.

3

## Industrial Adhesives and Tapes Division

3M Center, Building 225-3S-06

St. Paul, MN 55144-1000

800-362-3550 • 877-369-2923 (Fax)

[www.3M.com/Adhesives](http://www.3M.com/Adhesives)

3M is a trademark of  
3M. Printed in U.S.A.  
©3M 2016