



Technical Data Sheet

3M™ Sprayable Hot Melt Adhesive 6111 HT



[Product Details](#)



[Regulatory Info/SDS](#)

Product Description

3M™ Sprayable Hot Melt Adhesive is a heat applied, 100% solids, sprayable adhesive for a fast, neat alternative to aerosols, contact adhesives and solvent-based adhesives to bond most foams and many other lightweight materials.

- Sprayable 100% solids adhesives for most foams, fabrics particle board and thin metal. Has higher heat resistance than 6111. Tan in color for spraying on dark colored substrates

Product Features

- Sprayable thermoplastic adhesive.
- One or two surface application.
- Immediate initial strength
- Bonds wide variety of substrates, including most foams, plastics, particle board, light gauge metals.
- Solvent-free, 100% solids.
- Long bonding range.
- Excellent adhesion to polypropylene
- Controlled application with minimal overspray.

Note: Not recommended for bonding unsupported vinyl and leather

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 Uncured Physical Properties

Attribute Name	Value
Color	Tan/Blue ¹
Base	Polyolefin copolymer thermoplastic

¹ Colors may vary from nearly white to yellow/amber. Adhesive performance is not affected by color variation.

Typical Physical Properties

Attribute Name	Temperature	Value
Description		Higher Heat Resistance
Open Time		8 min ¹
Open Time		3 min ²
Flash Point		276 °C (529 °F)
Available Formats		Chip
Specific Gravity		0.93
Viscosity	191 °C (375 °F)	2,500-4,500 cP ³

¹ Two pieces of 3/4 in. thick, 2-lb. density polyester urethane foam were sprayed and bonded using 5 sec of firm pressure. After 24 hrs, bonds were pulled apart by hand. The criterion for open time is 100% foam tear.

² 3/4 in. thick, 2-lb. density polyester urethane foam. PVC cleaned with IPA and bonded to foam using 5 sec of firm pressure. 24 hr dwell, bonds were pulled apart by hand. The criterion for open time is 100% foam tear.

³ Brookfield Thermocel Viscometer in Centipoise using a #27 Spindle @ 10 RPM.

Typical Performance Characteristics

180° Peel Adhesion

Temperature: 22 °C (72 °F)

Substrate	Value
ABS	264 oz/in ¹
Cold Rolled Steel	478.4 oz/in ¹
Fir	409.6 oz/in ¹
High Density Polyethylene (HDPE)	56 oz/in ¹
Polypropylene (PP)	230.4 oz/in ¹
Polyvinyl chloride (PVC)	260.8 oz/in ¹

¹ Peel bonds of cotton duck were tested at a peel angle of 180° @ 2in/min separation rate @RT. The value listed is the average force required to peel the canvas from the substrates in pounds per inch of bond width (PIW).

Dead Load Shear

Test Condition	Value
0.22 lb (150 g) Load	91 °C (195 °F)
0.55 lb (250 g) Load	88 °C (190 °F)
1 lb Load	82 °C (180 °F)
2 lb Load	79 °C (175 °F)

Attribute Name	Value
Application Temperature	177 to 196 °C (350 to 385 °F)

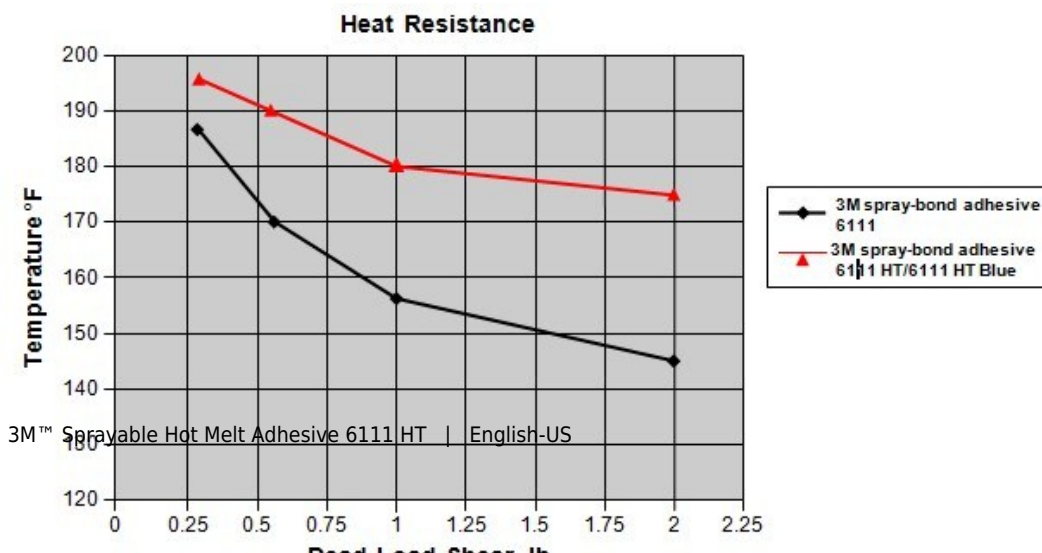
Foam Tear

Substrate	Value
Fir	Yes ¹
ABS	Yes ¹
Polypropylene (PP)	Yes ¹
Polyvinyl chloride (PVC)	Yes ¹
Cold Rolled Steel	Yes ¹
High Density Polyethylene (HDPE)	No ¹

¹ PU foam of 1.2 lb./cu. ft. density bonded to various substrates. After 24hr @ RT, attempt to pull the foam from the substrate. It was noted if the adhesive released from the substrate or if there was tearing of the foam.

Typical Environmental Characteristics

Temperature Resistance



Handling/Application Information

Directions for Use

1. Surface Preparation: Surfaces must be clean, dry and dust free. Wiping with a solvent such as isopropyl alcohol for plastic substrates or MEK (methyl ethyl ketone) for metal will aid in removing oil and dirt.*

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

2. Application: 3M™ Sprayable Hot Melt Adhesive is designed for spray application using either a hand held applicator or a "bulk" hot melt system designed for use with a sprayable hot melt adhesive.

Lot Code Information

Example of lot number: 8023K4

Code Description

8 Last digit of year manufactured 023 Julian date (day number 0 - 366)

K4 Alpha-numeric lot code (random not sequential)

In this example, the date of manufacture is January 23, 2008.

Storage and Shelf Life

Best storage temperature is 60-80°F (15-27°C). Do not store above 120°F (49°C).

Shelf life is the period of time, after 3M ships the product to a customer or distributor, the product will continue to satisfy applicable 3M manufacturing and quality standards. The shelf life stated applies only to product that is stored in the original, unopened container under specified storage conditions.

The stated shelf life of all 3M™ Sprayable Hot Melt Adhesives is 24 months from date of manufacture.

Available Sizes - Detailed

0.75 in dia. x 0.75 in Long

(1.9cm x 1.9cm)

22 pound boxes

850 pound Gaylord

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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