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**English-US** 



# **Technical Data Sheet**

3M™ High Performance Acrylic Adhesive 468MCF



Product Details

## **Product Description**

Finite Element Analysis (FEA)data is available for this product at: 3m.com/FEA

3M™ 468MCF features a 200MP laminating adhesive on a 3M proprietary liner, which creates micro-channels in the adhesive surface (back side surface of adhesive). The crosshatched pattern creates a continuous and permanent network of micro-channels in the back side of the adhesive, allowing air to escape from between the adhesive surface and the substrate. This helps to facilitate bubble free laminations of graphics to substrates.

3M™ Adhesive 200MP is a popular choice for graphic attachment and nameplate applications because it has excellent quality, consistency and durability. In addition, as a result of 3M's innovative, proprietary process, 3M adhesive 200MP also offers the following excellent performance characteristics.

## **Product Features**

- · Clarity (virtually free of vapor inclusions that are commonly found in adhesives produced by the traditional solvent coating technique).
- Excellent high temperature performance as well as excellent shear strength (that minimizes edge lifting and slippage of parts).
- Excellent resistance to harsh environments; this adhesive can withstand splashes of organic solvents, weak acids and bases and salt water, cleaning solutions, germicides, disinfectants, oils, etc. In addition, it performs well after exposure to humidity and hot/cold cycles.
- · Provides some initial repositionability when bonding to plastic parts (not metal) which allows graphic parts to be lifted and repositioned if initial alignment is incorrect.
- Adhesive family is provided with a polyester and PCK liner configurations to help ensure excellent process flexibility.

#### **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	Value
Adhesive Type		200MP
Total Tape Thickness	ASTM D3652	0.127 mm (5 mil)
Liner		PET
Liner Thickness		0.102 mm (4 mil)

## **Typical Performance Characteristics**

## 90° Peel Adhesion

Substrate: Stainless Steel Temperature: 23 °C (73 °F) Backing: 2 mil Aluminum Foil Test Method: ASTM D3330

Dwell Time	Value
15 min	7.6 N/cm (69 oz/in) <sup>1</sup>
72 h	16.1 N/cm (147 oz/in) <sup>1</sup>

<sup>1 304</sup> mm/min (12 in/min)

#### Static Shear

Substrate: Stainless Steel Backing: 2 mil Aluminum Foil Test Method: ASTM D3654

Temperature	Test Condition	Value
23 °C (73 °F)	2000 g	10,000+ min <sup>1</sup>
93 °C (200 °F)	1000 g	10,000+ min <sup>1</sup>
177 °C (350 °F)	500 g	10,000+ min <sup>1</sup>

<sup>25</sup> x 25 mm (1 in x 1 in) sample area, test terminated after 10,000 minutes

Attribute Name	Value
Short Term Temperature Resistance	204 °C (400 °F) ¹
Long Term Temperature Resistance	149 °C (300 °F) <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Short Term (minutes, hour)

## 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.

## **Automotive Disclaimer**

#### **Select Automotive Applications:**

This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

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## **ISO Statement**

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

<sup>&</sup>lt;sup>2</sup> Long Term (day, weeks)

 $3M^{\,\text{\tiny{IM}}}$  Industrial Adhesives and Tapes Division 3M Center, St. Paul, MN 55144-1000 3M.com/iatd

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