



Technical Data Sheet

3M™ High Performance Acrylic Adhesive 468MC



[Regulatory Info/SDS](#)

Product Description

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

3M™ 468MC 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 | | 58# PCK |
| Liner Thickness | | 0.11 mm (4.2 mil) |

Typical Performance Characteristics

90° Peel Adhesion

Substrate: Stainless Steel
 Temperature: 22 °C (72 °F)
 Backing: 2 mil Aluminum Foil
 Test Method: ASTM D3330

| Dwell Time | Value |
|------------|------------------------------------|
| 15 min | 9.3 N/cm (85 oz/in) ¹ |
| 72 h | 16.3 N/cm (149 oz/in) ¹ |

¹ 12 in/min (300 mm/min)

Static Shear

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

| Temperature | Test Condition | Value |
|-----------------|----------------|--------------------------|
| 22 °C (72 °F) | 2000g | 10,000+ min ¹ |
| 93 °C (200 °F) | 1000g | 10,000+ min ¹ |
| 177 °C (350 °F) | 500g | 10,000+ min ¹ |

¹ 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) ² |

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

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 18 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.

Information

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ISO Statement

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

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