Adhesive Transfer Tapes with Adhesive 200MP

467MP • 468MP • 467MPF • 468MPF • 7952MP • 7955MP • 7962MP • 7965MP

Product Data Sheet

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Supersedes: New

Product Description

3M™ High Performance Acrylic Adhesive 200MP is a popular choice for graphic attachment and general industrial joining applications. It provides good adhesion to metal and high surface energy plastics.

Key Features

- This adhesive provides some initial repositionability for placement accuracy when bonding to plastics
- Up to 200^{0}C short-term heat resistance
- Excellent solvent resistance
- Excellent shear strength to resist slippage and edge lifting
- It also performs well after exposure to humidity and hot/cold cycles.

Physical Properties

Products	Adhesive Thickness *	Liner Type Liner Thickness	Liner Colour
467MP	0.058 mm	95 g/m^2 Polycoated Kraft Paper 0.098 mm	
468MP	0.132 mm	95 g/m^2 Polycoated Kraft Paper 0.098 mm	
467MPF	0.058 mm	Polyester Film (PET) 0.052 mm	
468MPF	0.132 mm	Polyester Film (PET) 0.052 mm	

3M™ Double Linered 200MP Adhesive Transfer Tape products

Products	Adhesive Thickness	Liner 1 Type Liner Thickness	Liner 1 Colour	Liner 2 Type Liner Thickness	Liner 2 Colour
7952MP	0.058 mm	94g/m^2 Polycoated Kraft Paper 0.097 mm		95 g/m^2 Polycoated Kraft Paper 0.098 mm	
7955MP	0.132 mm	95 g/m^2 Polycoated Kraft Paper 0.098 mm		95 g/m^2 Polycoated Kraft Paper 0.098 mm	
7962MP	0.058 mm	129 g/m2 Polycoated Kraft Paper 0.136 mm		95 g/m^2 Polycoated Kraft Paper 0.098 mm	
7965MP	0.132 mm	129 g/m2 Polycoated Kraft Paper 0.136 mm		95 g/m^2 Polycoated Kraft Paper 0.098 mm	

* calculated from coating weight of adhesive

Performance Characteristics

Products	467MP, 467MPF, 7952MP, 7962MP	468MP, 468MPF, 7955MP, 7965MP
Peel Adhesion to Stainless Steel FTM2 90° Peel, 300 mm/Min, 72 h RT	12,7 N/cm	18,2 N/cm
Peel Adhesion to Stainless Steel FTM1 180° Peel, 300 mm/Min, 72 h RT	**36,6** N/cm	**38,9** N/cm
Peel Adhesion to Polyester PET FTM2 90° Peel, 300 mm/Min, 72 h RT	**9,4** N/cm	**10,0** N/cm
Peel Adhesion to Polycarbonate PC, FTM2 90° Peel, 300 mm/Min, 72 h RT	**9,8** N/cm	**12,3** N/cm
Peel Adhesion to Aluminium FTM2 90° Peel, 300 mm/Min, 72 h RT	**10,7** N/cm	**17,5** N/cm
Static Shear Strength FTM8, 1000 g, 12,5 mm * 25 mm	> 10,000 Minutes	> 10,000 Minutes
Immersion 1 h in 5 % H2SO4	OK, only 1 mm edge corrosion of metal	OK, only 1 mm edge corrosion of metal
Immersion 1 h in 5 % NaOH	OK, only 1 mm edge corrosion of metal	OK, only 1 mm edge corrosion of metal
Immersion 1 h in Petrol Premium	Slight adhesive softening at edges	Slight adhesive softening at edges

Note: For all tests the adhesive is first laminated to 50 µm aluminium foil.

Application Ideas

- Long term bonding of graphic nameplates and overlays ("subsurface" printed polycarbonate or polyester) to metal and high surface energy plastics in the aerospace, medical and industrial equipment, automotive, appliance, and electronics markets.
- Bonding metal nameplates and rating plates in the aerospace, medical and industrial equipment, automotive, appliance, and electronics markets.
- Bonding graphic overlays for membrane switches and for bonding the complete switch to the equipment surface.
- High speed processing of parts in the medical, telecommunications and electronics markets (medical components, durable labels, and flexible circuits).
- Lamination to industrial foams for rotary die-cutting of small gaskets for industrial and electronics markets

Application Techniques

For maximum bond strength (during installation of the final part) the surface should be thoroughly cleaned and dried. Typical cleaning solvents are heptane (for oily surfaces) or isopropyl alcohol for plastics. Use reagent grade solvents since common household materials like rubbing alcohol frequently contain oils to minimize the drying effect on skin and can interfere with the performance of a pressure-sensitive adhesive.

***Note:** Carefully read and follow the manufacturer's precautions and directions for use when working with solvents.

It is necessary to provide pressure during lamination (20 N/cm2 recommended) and during final part installation (10-15 psi) to allow the adhesive to come into direct contact with the substrate. Using a hard-edged plastic tool, which is the full width of the laminated part, helps to provide the necessary pressure at the point of lamination. Heat can increase bond strength when bonding to metal parts (generally this same increase is observed at room temperature over longer times, weeks). For plastic parts, the bond strength is not enhanced with the addition of heat.

The ideal adhesive application temperature range is 15 °C to 38 °C. Application is not recommended if the surface temperature is below 10°C because the adhesive becomes too firm to adhere readily. Once properly applied, at the recommended application temperature, low temperature holding is generally satisfactory (please refer to section VII of the Typical Physical Properties and Performance Characteristics). When bonding a thin, smooth, flexible material to a smooth surface, it is generally acceptable to use 58 µm of 3M™ Adhesive 200MP. If a texture is visible on one or both surfaces, the 132 µm 3M adhesive 200MP would be suggested. If both materials are rigid, it may be necessary to use a thicker adhesive to successfully bond the components. 3M™ VHB™ Acrylic Foam Tapes may be required.

Storage & Shelf Life

Store at 16 °C – 25 °C and 40-65 % relative humidity in its original box. The product can be stored up to 18 months after production.

Note: If the products have been exposed to severe weather conditions, we suggest to pre-condition the products at the above storage conditions for at least 24 hours before using them.

Precautionary Information	TSCA: These products are defined as articles under the Toxic Substances Certification Control Act and therefore, are exempt from inventory listing requirements. MSDS: These products are not subject to the MSDS requirements of the Occupational Safety and Health Administration's Hazard Communication Standard, 29 C.F.R. 1910.1200(b)(6)(v). When used under reasonable conditions or in accordance with the 3M directions for use, the products should not present a health and safety hazard. However, use or processing of the products in a manner not in accordance with the directions for use may affect their performance and present potential health and safety hazards.
For Additional Information	To request additional product information or to arrange for sales assistance, call 0330 0538936. Address correspondence to: IATD, 3M United Kingdom Plc, 3M House, 4th Floor, Building 8, Exchange Quay, Salford Quays, Manchester, M5 3EJ.
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Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.

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