## **3M**

# **Double Coated Tapes** with Adhesive 200MP

9492MP • 9495MP • 9495MPF • 9495FL • 9495B

Technical Data August, 2008

### **Product Description**

3M<sup>TM</sup> Double Coated Tapes with 3M<sup>TM</sup> Adhesive 200MP feature a thin polyester film for dimensional stability and improved handling with ease of die-cutting and laminating. The 3M adhesive 200MP provides exceptional temperature and chemical resistance. 3M<sup>TM</sup> Double Coated Tape 9495B has a black polyester film to provide opacity or visibility.

#### **Constructions**

| Product<br>Number                                | Faceside <sup>1,4</sup><br>Adhesive<br>Type/Thickness | Carrier<br>Type/Thickness                      | Backside <sup>2,4</sup><br>Adhesive<br>Type/Thickness | Liner Color,<br>Type, Print   | Liner<br>Caliper                           | Total Tape<br>Thickness<br>(w/o liner) |
|--|---|--|---|---|--|--|
| 3M <sup>™</sup> Double<br>Coated Tape<br>9492MP  | 200MP/<br>0.001"<br>(0.025mm)                         | Clear PET <sup>3</sup><br>0.0005"<br>(0.013mm) | 200MP/<br>0.001"<br>(0.025mm)                         | Tan, 58#,<br>Polycoated Kraft,<br>"3M 200MP"  | 0.004"<br>(0.10mm)                         | 0.0025"<br>(0.06mm)                    |
| 3M <sup>™</sup> Double<br>Coated Tape<br>9495MP  | 200MP/<br>0.0029"<br>(0.074mm)                        | Clear PET<br>0.0005"<br>(0.013mm)              | 200MP/<br>0.0023"<br>(0.058mm)                        | Tan, 58#,<br>Polycoated Kraft,<br>"3M 200MP"  | 0.004"<br>(0.10mm)                         | 0.0057"<br>(0.14mm)                    |
| 3M <sup>™</sup> Double<br>Coated Tape<br>9495MPF | 200MP/<br>0.0029"<br>(0.074mm)                        | Clear PET<br>0.0005"<br>(0.013mm)              | 200MP/<br>0.0023"<br>(0.058mm)                        | Clear, PET,<br>No Print   | 0.002"<br>(0.051mm)                        | 0.0057"<br>(0.14mm)                    |
| 3M <sup>™</sup> Double<br>Coated Tape<br>9495FL  | 200MP/<br>0.002"<br>(0.051mm)                         | Clear PET<br>0.001"<br>(0.025mm)               | 200MP/<br>0.002"<br>(0.051mm)                         | <sup>5</sup> Faceside liner –<br>Translucent, HDPE<br>Backside liner – Tan,<br>No Print | 0.003"<br>(0.076mm)/<br>0.004"<br>(0.10mm) | 0.0050"<br>(0.13mm)                    |
| 3M <sup>™</sup> Double<br>Coated Tape<br>9495B   | 200MP/<br>0.0029"<br>(0.074mm)                        | Black PET<br>0.0005"<br>(0.013mm)              | 200MP/<br>0.0023"<br>(0.058mm)                        | Tan, 58#,<br>Polycoated Kraft,<br>"3M 200MP"  | 0.004"<br>(0.010mm)                        | 0.0057"<br>(0.14mm)                    |

Note 1: Faceside adhesive is on the interior of the roll, exposed when unwound.

Note 2: Backside adhesive is on the exterior of the roll, exposed when liner is removed.

Note 3: PET (Polyester).

Note 4: The caliper listed is based on a calculation from manufacturing controlled adhesive coat weights using a density of 1.012 g/cc. While past data pages have listed a nominal caliper of 4.8 mils for 3M tapes 9495MP, 9495FL and 9495B, the coat weight has not changed.

Note 5: Backside liner is primary (stays with die cut part); Faceside is secondary (removed first).

### 3M<sup>™</sup> Double Coated Tapes with Adhesive 200MP

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| <b>Typical Physical</b> |
|-------------------------|
| <b>Properties and</b>   |
| Performance             |
| Characteristics         |

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

| Product Number   | 3M™ Double<br>Coated Tape<br>9492MP | 3M™ Double<br>Coated Tapes<br>9495MP, 9495MPF,<br>9495B, 9495FL |  |
|--|-------------------------------------|---|--|
| Adhesion to stainless steel<br>ASTM D3330 - 90 degree                                | Oz/in<br>(N/100 mm)                 | Oz/in<br>(N/100 mm)   |  |
| - 15 minute RT   | 45 (49)                             | 70 (76)   |  |
| - 72 Hour RT   | 62 (67)                             | 82 (89)   |  |
| - 72 Hour 158°F  | 69 (75)                             | 92 (100)  |  |
| ASTM D3330 - 180 degree, 2 mil al foil<br>- 72 Hour RT                               | _                                   | 100 (109)   |  |
| Adhesion to other surfaces*<br>ASTM D3330 – 90 degree,<br>2 mil al foil, 72 hours RT |                                     |   |  |
| ABS  | 48 (52)                             | 62 (67)   |  |
| Acrylic  | 55 (60)                             | 60 (66)   |  |
| Polycarbonate  | 37 (40)                             | 60 (66)   |  |
| Shear Strength – ASTM D3654 modified - (.5 inch² sample size)                        |                                     |   |  |
| 1000 grams at 72°F   | >10,000 min                         | >10,000 min   |  |
| 500 grams at 158°F   | >10,000 min                         | >10,000 min   |  |
| Relative High Temperature Operating Ranges:  |                                     |   |  |
| Long Term (days, weeks)  | 250°F                               | 250°F   |  |
| Short Term (minutes, hours)  | 300°F                               | 300°F   |  |

<sup>\*</sup>Not recommended for low energy plastics (polypropylene, polyethylene). For these surfaces, please refer to 3M<sup>TM</sup> Adhesive 300, 300LSE, 350 and 300MP.

### **Available Sizes**

Roll length, width, slitting tolerance, core size. Available Lengths (Subject to Minimum order requirements) Maximum Length 1/4" to 1" 144 yd (132 m) 1" to 54" 360 yd (329 m) Available Widths Minimum 1/4" (6.35 mm) Maximum - 3M<sup>™</sup> Double Coated Tapes 9492MP, 54" (1372 mm) 9495MP, 9495MPF, 9495B 3M™ Double Coated Tape 9495FL 48" (1219 mm) Normal Slitting Tolerance ± 1/32" (0.8 mm) Core Size 3.0" (76.2 mm)

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#### **Features**

- A thin polyester carrier in the products provides dimensional stability and improved handling with ease of die-cutting and lamination compared to adhesive transfer tapes.
- 3M<sup>TM</sup> Adhesive 200MP provides exceptional temperature and chemical resistance and withstands tough application environments.
- 3M<sup>TM</sup> Double Coated Tape 9495MPF has a film liner for ease in rotary die-cutting and applications who demand low particle generating parts.

### **Application Techniques**

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and improves bond strength.

To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Some typical surface cleaning solvents are isopropyl alcohol or heptane.\*

Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C). Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

\*Note: Carefully read and follow the manufacturer's precautions and directions for use when working with solvents. These cleaning recommendations may not be in compliance with the rules of certain air quality management districts in California; consult applicable rules before use.

### **Application Ideas**

- · Graphic overlays
- Nameplates
- Appliques
- Decorative Trim
- Thermal and sound damping applications in the electronics and appliance industry.
- Gasket and lens attachment in mobile phones and pagers.

### Liner Configuration Guide

General purpose steel rule die-cutting 58# PCK
Steel rule cutting many nameplates on common sheet Kiss cutting, steel rule 86# PCK
Rotary die-cutting PET

Selective die-cutting (cut adhesive before laminate) Double-linered

Thermoforming HDPE (High density Polyethylene)

Part inspection HDPE, PET

Embossed metal parts White PP (polypropylene), HDPE

Metal parts (punch press) PET

# Adding Liners for 3M<sup>™</sup> Adhesive 200MP Double Coated Film Tape

- 1. Rotary processing, tape only, on a densified (\*outside of #4994) kraft liner. In this process the tape waste will stay with the 58# PCK liner, leaving adhesive die-cuts dispensable from the #4994 (densified kraft) liner.
- Rotary processing for finished parts. It is most efficient to use the polyester linered double coat (3M tape 9495MPF). Current process limitations prevent the supply of the 3M adhesive 200MP on a DK liner.

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### **Application Equipment**

To apply adhesives in a wide web format, lamination equipment is required to ensure acceptable quality. To learn more about working with pressure-sensitive adhesives please refer to technical bulletin, Lamination Techniques for Converters of Laminating Adhesives (70-0704-1430-8).

For additional dispenser information, contact your local 3M sales representative, or the toll free 3M sales assistance number at 1-800-362-3550.

### Storage

Store in original cartons at 70°F (21°C) and 50% relative humidity.

### **Shelf Life**

If stored under proper conditions, product retains its performance and properties for two years from date of manufacture.

#### **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.

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ISO 9001:2000

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



Industrial Adhesives and Tapes Division Converters Markets

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