

3M

Double Coated Black PET Tape

GTM220

Preliminary Technical Data

June 2012

Developmental Status Notice

3M Double Coated Black PET Tape GTM220 is a 3M developmental product. It is currently available on a limited basis and is only provided for evaluation in qualified applications.

**Product
Description**

GTM220 : 3M™ Double Coated Black PET Tape for dimensional stability and improved handling with ease of die cutting and laminating. The high tack and peel adhesion adhesive provides good adhesion to a variety of surfaces.

Construction

GTM220

Faceside ¹ Adhesive Type/Thickness: _____ Acrylate/0.0038" (0.096mm)

Backside ² Adhesive Type/Thickness: _____ Acrylate/0.0038" (0.096mm)

Liner Color, Type, Print _____ Brown, PCK (Polycoated Kraft), Green 3M logo

Liner Caliper: _____ 0.00435" (0.110mm)

Carrier Type: _____ Black PET (0.0125mm)

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.

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Typical Physical Properties and Performance Characteristics

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

180 peel strength

ASTM D3330-180 degree, 2 mil Aluminum foil backing

Adhesion to stainless steel

Oz/in(N/100mm)

- 30 minute RT

111 (120)

- 72 hours RT

134 (145)

Adhesion to PC(Polycarbonate) / PP (Polypropylene)

- 30 minute RT

119 (128) / 78 (84)

- 72 hours RT

125 (135) / 86 (93)

Shear Strength

ASTM D3654, 1X1 inch, 1000grams

minutes

72° F (22°C)

10000

Relative solvent resistance

Medium

UV Resistance

Medium

Relative High Temperature

Operating Ranges:

Long Term (days, weeks)

80°C

Short Term (minutes, hours)

150°C

Shelf Life of Tape in Roll Form

24 months from date of manufacture when stored in original cartons at 70° F (21°C) and 50% relative humidity.

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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.

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

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.

General Information

The PET carrier can add dimensional stability to foams and other substrates. The carrier also provides easier handling during slitting and die-cutting.

Features

3M™ Adhesive is a medium-firm acrylic adhesive system featuring both high initial adhesion and good high temperature holding power.

Application Ideas

- Nameplate bonding
 - Plastic film lamination/bonding
 - Splicing
 - Foam bonding
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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.

For additional dispenser information, contact your local 3M sales representative.

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Certification/ Recognition

MSDS: 3M has not prepared a MSDS for the products which are not subject to the MSDS requirements of the Occupational Safety and Health Administration's Hazard Communication Standard, 29 C.F.R.

TSCA: The product are defined as articles under the Toxic Substances Control Act and therefore, are exempt from inventory listing requirements.

Important Notice

3M MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M product. Given the variety of factors that can affect the use and performance of a 3M product, some of which 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.

Limitation of Remedies and Liability

If the 3M product is proved to be defective, The exclusive remedy, at 3M'S option, shall be to refund the purchase price of or to repair or rplace the defective 3M product. 3M shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including, but not limited to, contract, negligence, warranty, or strict liability.

ISO 9002

This Industrial and Adhesives Division product was manufactured under a 3M quality system registered to ISO 9002 standards.

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