

3M

Double Coated Tissue Tape

55231

Technical Data

Dec 2007

Product Description

55231: 3M™ Double Coated Tissue Tape for dimensional stability and improved handling with ease of die cutting and laminating. The high peel adhesion adhesive provides excellent adhesion to a variety of surfaces.

Construction

55231

Faceside ¹ Adhesive Type/Thickness: Acrylate /0.003" (0.076mm)

Backside ² Adhesive Type/Thickness: Acrylate/0.003" (0.076mm)

Liner Color, Type, Print White, 120gsm PCK , 3M logo

Liner Caliper: 0.0056" (0.14mm)

Carrier Type: Tissue

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.

Product Number	55231
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Adhesion to stainless steel ASTM D3330-180 degree, 2 mil PET	Oz/in (N/100mm)
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- 30 minute RT	118(135)
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Adhesion to PC

ASTM D3330 –180 degree, 2mil PET

- 30 minute RT	118(135)
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Adhesion to PP

ASTM D3330 –180 degree, 2mil PET

- 30 minute RT	90(100)
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Shear Strength – ASTM D3654
(1 inch² sample size)

1000grams at 72° F (22°C)	5000 minutes
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Relative solvent resistance	Medium-Low
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UV Resistance	Medium
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Relative High Temperature

Operating Ranges:

Long Term (days, weeks)	70°C
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Short Term (minutes, hours)	150°C
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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

All tapes have a tissue carrier, which 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
- Foam bonding

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 replace 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 Engineered Adhesives Division product was manufactured under a 3M quality system registered to ISO 9002 standards.

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3M Maxdo, Xingyi Road 8
Shanghai, PRC.

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