Double Coated Tape with Adhesive 420

9795 • 9795B • 9799

Technical Data **July, 2003**

Product Description

3M™ Double Coated Tapes with 3M™ Adhesive 420 are high tack film tapes that feature a polyester film carrier for dimensional stability and improved handling with ease of die cutting and laminating. 3M™ Double Coated Film Tape 9795B is provided with a black polyester film carrier for added opacity. 3M™ Double Coated Film Tape 9799 features a thicker polyester film carrier which provides easier handling and good gap filling for rigid to rigid substrate bonding. The high tack acrylic 3M adhesive 420 provides both high performance at a wide temperature range and excellent adhesion to many plastics.

Construction

Product Number	Faceside[1] Adhesive Type/ Thickness	Carrier Type/ Thickness	Backside[2] Adhesive Type/ Thickness	Liner Color, Type Print	Liner Caliper
3M tape 9795	420/ 0.0028" (0.071mm)	PET[3] 0.0005" (0.013mm)	420/ 0.0023" (0.058mm)	Tan, 83# Polycoated Kraft, "3M"	0.0065" (0.17mm)
3M tape 9795B	420/ 0.0028" (0.071mm)	Black PET 0.0005" (0.013mm)	420/ 0.0023" (0.058mm)	Tan, 83# Polycoated Kraft, "3M"	0.0065" (0.17mm)
3M tape 9799	420/ 0.0035" (0.089mm)	PET 0.002" (0.05mm)	420/ 0.0035" (0.089mm)	Tan, 83# Polycoated Kraft, "3M"	0.0065" (0.17mm)

[1] Faceside adhesive is on the interior of the roll, exposed when unwound.

[2] Backside adhesive is on the exterior of the roll, exposed when liner is removed.

[3] PET (Polyester).

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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	3M™ Double Coated Tapes 9795, 9795B	3M™ Double Coated Tape 9799
Adhesion to stainless steel ASTM D3330 - 90 degree	Oz/in (N/100 mm)	Oz/in (N/100 mm)
- 15 minutes RT	40 (43)	61 (66)
- 72 hour RT	78 (85)	91 (99)
- 72 hour 158°F	114 (124)	125 (136)
ASTM D3330 - 180 degree, 2 mil Al foil	Oz/in (N/100 mm)	Oz/in (N/100 mm)
- 72 hour RT	65 (71)	143 (155)
Adhesion to other surfaces ASTM D3330 - 90 degree, 2 mil Al foil, 72 hour RT	Oz/in (N/100 mm)	Oz/in (N/100 mm)
ABS	55 (60)	61 (66)
Polycarbonate	64 (70)	82 (89)
Polypropylene	35 (38)	36 (39)
HDPE	20 (22)	25 (27)
Shear Strength ASTM D3654 modified - (.5 inch^2 sample size)	minutes	minutes
1000 grams at 72°F	>10,000	>10,000
500 grams at 158°F	>10,000	>10,000
Relative High Temperature Operating Ranges		
Long Term (days, weeks)	250°F	250°F
Short Term (minutes, hours)	300°F	300°F

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)	144 yd. (132 m)
1" to 50"	–	360 yd. (329 m)
1" to 54"	360 yd. (329 m)	–
Available Widths		
Minimum	1/4 in. (6.35 mm)	1/4 in. (6.35 mm)
Maximum	54 in. (1372 mm)	48 in. (1219 mm)
Normal Slitting Tolerance	± 1/32 in. (0.08 mm)	± 1/32 in. (0.08 mm)
Core Size (ID)	3.0 in. (76.2 mm)	3.0 in. (76.2 mm)

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Features

- A polyester carrier in the products provides dimensional stability and improved handling with ease of die cutting and lamination compared to adhesive transfer tapes.
- 3M™ Adhesive 420 provides good temperature and chemical resistance and withstands tough application environments.

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. These cleaning recommendations may not be in compliance with the rules of certain air quality management districts in California; consult applicable rules before use.

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.

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.

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For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-223-7427 or visit www.3M.com/converter. Address correspondence to: 3M Industrial Adhesives and Tapes Division, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55144-1000. Our fax number is 651-778-4244. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

Product Use

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ISO 9002

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

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Converter Markets
Industrial Adhesives and Tapes Division

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