

3M™ Double Coated Dielectric Tape 3514

Product Description

3M™ Double Coated Dielectric Tape 3514 features a clear polyester film for dimensional stability and improved handling with ease of diecutting and laminating. 3M™ Double Coated Dielectric Tape 3514 features an acrylic adhesive that provides a combination of high wet grab and initial adhesion and good shear holding power to a wide variety of materials.

Features

- An acrylic adhesive that provides very high adhesion to a wide variety of materials, excellent shear holding power, and high temperature resistance.
- 3M acrylic adhesive provides exceptional temperature and chemical resistance and withstands tough application environment.
- 3M™ Double Coated Dielectric Tape 3514 has a moisture resistant liner which can withstand high humidity conditions with minimal cockling or wrinkling.
- 3M™ Double Coated Dielectric Tape 3514 has a film carrier, which can add dimensional stability to substrates. The carrier also provides easier handling during slitting and die-cutting.

UL Component Recognition

3514 is UL listed under UL 510 OANZ2 File E230409.

Product Construction

Properties	Typical Values
Adhesive Type	Acrylic
Backing	Polyester Film
Adhesive Thickness mil (mm)	2.1 (0.053)
Backing Thickness mil (mm)	0.9 (0.023)
Adhesive Thickness mil (mm)	2.1 (0.053)
Release Liner mil (mm)	4.3 (0.109)
Total Thickness mil (mm)	9.8 (0.249)
Color	Translucent

Typical Physical Properties

Properties	Typical Values	Test Method
Adhesion to stainless steel		
15 minute RT	71 (77)	ASTM D3330 90°
72 hour RT	93 (101)	
72 hour 158°F (70°C)	121 (132)	
72 hour RT	140 (153)	ASTM D3330 180°, 2 mil aluminum foil

Adhesion to other surfaces		
ABS	74 (81)	ASTM D3330 90°, 2 mil aluminum foil, 72 hour RT
Polycarbonate (PC)	60 (65)	
Polypropylene (PP)	44 (48)	
Polyester (PET)	77 (84)	
High Density Polyethylene (HDPE)	33 (36)	

Shear Strength		
1000 grams @72°F (22°C)	10,000 minutes	ASTM D3654 modified - (.5 inch ² sample size)
500 grams at 158°F (70°C)	10,000 minutes	

Relative High Temperature Operating Ranges:	
Long Term (days, weeks)	200°F (93°C)
Short Term (minutes, hours)	350°F (177°C)
Dielectric Strength	6.7kV

Storage

Store in original cartons at 72°F (22°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.



Note: All tapes should be thoroughly evaluated by the user under actual conditions with intended substrates to determine whether a specific tape is fit for a particular purpose and suitable for user's method of application, especially if expected use involves extreme environmental conditions.

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

United States

3M Renewable Energy Division
800 755 2654

Germany

49 2131 144450

Denmark

45 43 480100

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34 91 3216000

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44 1344 858000

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65 6450 8888

China

86 21 62753535

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82 2 3771 4043

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91 80 22231414

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800 364 3577

Brazil

0800 13 23 33

Mexico

52 55 52702250

Taiwan

886 933 896752

Japan

81 3 3709 8283

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Other Areas

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For more information on our solar manufacturing product line, contact 3M Renewable Energy at 800-755-2654 or visit us at www.3M.com/solar.

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**Renewable Energy Division**

3M Center, Building 235-1S-67
St. Paul, MN 55144-1100
1-800-755-2654
www.3M.com/solar

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