

# **Double Coated Polyethylene Foam Tapes**4421

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Temporary Technical Data

July 1, 2006

<b>Product Description</b>	Double Coated Polyethylene Foam Tape with polycoated paper liner			
Product Uses	3M <sup>TM</sup> 4421 tape is specially formulated for many indoor and limited outdoor general mounting and joining application, including bonding to polyethylene and polypropylene and many other plastics without primer treatment, where moderated temperature and shear performance general purpose mounting and joining application.			
	<b>Note</b> : 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.			
Construction	Product	4421 White	4421 Black	
	Tape Thickness	1 mm		
	- Tolerance	$\pm~15\%$		
	Tape Color	White	Black	
	Carrier Type	Polyethylene foam		
	Release Liner	0.13 mm Polycoated Paper Liner Red 3M Logo printed	0.13 mm Polycoated Paper Liner Grey 3M Logo printed	
Roll Length	Standard (m)	10		
Roll width	Minimum (mm)	6.4		
	Maximum (mm)	1000		
<b>Slitting Tolerance</b>	mm	+/- 0.8		
<b>Tape Density</b>	Approximately (Kg/m³)	15	0	

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	4421(White/Black)	
Peel Adhesion	Kg/12.7mm	
Stainless Steel	1.2	
	1.3	
Polyethylene	1.1	
ASTM D-3330(90° Peel)		
Room temp. 72 hr aging		
Jaw speed: 305 mm/min	V - /C 45?	
Dynamic Shear	Kg/6.45cm <sup>2</sup>	
To Stainless Steel	17	
ASTM D-1002		
With Al strip		
Room temp. 72 hr aging		
Jaw speed: 12.7 mm/min		
-		
Normal Tensile	Kg/6.45cm <sup>2</sup>	
T-block (Al to Al)	20	
ASTM D-897	20	
Room temp. 72 hr aging		
Jaw speed : 50.8 mm/min		
our speed to ord immedian		
Static Shear	Minutes	
To Stainless Steel		
ASTM D-3654		
6.45 cm <sup>2</sup> overlap at RT	10,000+	
500 grams loading	10,000	
Shelf Life	12 months from date of manufacture when stored in original cartons at room temperature & 50% RH	

#### **Application Technique**

- Bond strength is dependent upon the amount of surface contact area of applied tape. Firm application pressure helps develop better adhesive contact and improve bond strength.
- To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Typical surface cleaning solvents are isopropyl alcohol and water (rubbing alcohol) or heptane. **Note**: Be sure to follow manufacturer's safety precautions and directions for use when using 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.

#### **Application Ideas**

- Signs, nameplates and plaques
- Pointed of purchase and other displays
- Plastics hooks, racks and dispensers
- Wire and cable clip
- Appliance, display case and electronics equipment trim

### For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 82-80-533-4114. Address correspondence to: 3M Engineered Adhesives Division, 3M Korea LTD, Daehan Invest Trust BLDG 22<sup>nd</sup> Floor, Yoido Dong, Yongdeungpogu, Seoul, Korea. Our fax number is 82-2-786-7429

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(ISO 9002)

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

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#### **Industrial Adhesive & Tape Division**

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