



Cleanroom Vinyl Tape

1251

Technical Data

February, 2006

Product Description

3M™ Cleanroom Vinyl Tape 1251 is a various colored (5 colors and transparent) vinyl plastic film tape with a rubber adhesive ideal for many color coding, sealing, abrasion protection, wrapping, lane marking, construction, and in-process applications.

Construction

Backing	Adhesive	Color	Standard Roll Sizes
Pigmented and transparent vinyl plastic	Rubber	Yellow, red, blue, green, white, and transparent	1/2 in., 3/4 in., 1 in., 2 in. x 36 yds. (13 mm, 19 mm, 25 mm, 50 mm x 33 m)

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.

Properties for all colors except transparent	ASTM Test Method
Adhesion to:	D-3330
Stainless steel - Initial	21 oz./in.
Stainless steel - Aged ¹	31 oz./in.
Polypropylene - Initial	16 oz./in.
Polypropylene - Aged ¹	23 oz./in.
Tensile Strengths at Break:	15 lbs./in.
Elongation at Break:	140%
Tape Thickness:	D-3652
All colors (except transparent)	5.2 mils
Transparent	5.4 mils
Outgassing by Headspace GC Analysis ²	D-4526 ³
Total outgassing	<0.2% by weight

¹Aged adhesion is a measure of ultimate adhesion, where the tape is applied to the target substrate and aged for 3 days at 120°F (49°C) prior to testing.

²Outgassing = Dynamic headspace analysis of volatile components collected during a 4 hour @ 80°C heat cycle using a Hewlett-Packard Model 5890 Series II gas chromatograph coupled with a Hewlett-Packard Model 5989B mass spectrometer.

³ASTM test method modified per footnote #2 above.

General Information

- Product is cleaned and packaged in cleanroom.
- Rolls are wound onto plastic cores and bagged with Class 100 clean film.
- Best results are attained when applied to clean, dry surfaces between 60° to 85°F (15° to 27°C).
- Conformability and dead stretch properties are ideal for taping, wrapping or sealing many curved or irregular surfaces.
- Pigmented backings maintain their vivid colors even when exposed to heavy abrasion.

Note: While 3M tape 1251 resists many common solvents, it should not be exposed to ketones, chlorinated hydrocarbons, and esters, which may cause the backing to swell or curl.

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- Application Ideas**
- Color coding and identification of in-process parts.
 - Cleanroom construction and maintenance.
 - Lane and area marking.

Key Attributes	Features	Advantages	Benefits
	4 mil pigmented vinyl backing	Conformable to many irregular surfaces Abrasion resistant Dead stretch properties Sharp contrasting colors Writeable with cleanroom pen	Tight sealing Improved productivity Longer application life Provides straight line for masking, marking and sealing applications Easy identification Can be used for color coding and marking to enhance quality control
	Translucent synthetic rubber adhesive	Bonds well to many metal and plastic surfaces Cleanly removable from many surfaces.	Good tape repositionability and adhesion build with time No adhesive transfer Reduced rework

Storage Store at 60° to 80°F (15° to 27°C) and 40 to 50% relative humidity

Shelf Life To obtain best performance, use this product within 18 months from date of manufacture.

For Additional Information To request additional product information or to arrange for sales assistance, call toll free 1-800-251-8634. Address correspondence to: 3M Electronics Markets Materials Division, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55144-1000. Our fax number is 651-778-4244 or 1-877-369-2923. In Canada, phone: 1-800-634-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

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