

# 3M

## Vinyl Tape

### 471

Technical Data

April, 2003

**Product Description** 3M™ Vinyl Tape 471 is a conformable colored (9 colors plus transparent) vinyl backing with a rubber adhesive ideal for many lane and safety markings, color coding, abrasion protection, masking, sealing, splicing and other general purpose applications.

Product Construction	Backing	Adhesive	Color	Standard Roll Length
	4 mil pigmented and transparent vinyl	Rubber	Yellow, white, red, black, brown, green, orange, purple, blue and transparent	36 yds. (33 m)

Typical Physical Properties	ASTM Test Method	
<b>Properties for all colors except transparent:</b>		
Adhesion to Steel:	23 oz./in. width (25 N/100 mm)	D-3330
Tensile Strength at Break:	16 lbs./in. width (280 N/100 mm)	D-3759
Elongation at Break:	130%	D-3759
Backing Thickness:	4.1 mils (0.10 mm)	D-3652
Total Tape Thickness:	5.2 mils (0.13 mm)	D-3652
Temperature Use Range:	40° to 170°F (4° to 77°C)	
<b>Properties for transparent:</b>		
Adhesion to Steel:	26 oz./in. width (28 N/100 mm)	D-3330
Tensile Strength at Break:	16 lbs./in. width (280 N/100 mm)	D-3759
Elongation at Break:	180%	D-3759
Backing Thickness:	4.1 mils (0.10 mm)	D-3652
Total Tape Thickness:	5.4 mils (0.14 mm)	D-3652

# 3M™ Vinyl Tape

471

---

## Features

- Pigmented backings maintain their vivid colors even when exposed to heavy abrasion.
- Conformability and dead stretch properties are ideal for taping, wrapping or sealing many curved or irregular surfaces.
- Longer life than many competitive products which are surface printed.
- Longer periods between rework helps improve productivity.
- Readily conformable to many irregular surfaces which stays in place.
- Abrasion resistant and longer potential application life.
- Dead stretch properties provide straighter lines when masking, marking and sealing.
- Easier to work with, less rework and improved appearance.
- Sharper colors for color coding or marking systems for a better appearance, draws attention and helps enhance plant safety.
- Rubber adhesive which provides good adhesion to many surfaces for easier application and excellent holding strength.
- Clean removal which helps reduce clean-up and labor costs.
- Good solvent resistance for excellent application protection and longer product life.

---

## Application Techniques

- Best results are attained when applied to a clean, dry surface at temperatures between 60° to 85°F (16° to 27°C).

**Note:** While 3M™ Vinyl Tape 471 resists many common solvents, it should not be exposed to ketones, chlorinated hydrocarbons and esters found in lacquer thinner, degreasers, paint strippers, etc., which may cause the backing to swell or curl.

---

## Application Ideas

- Ideal for masking, wrapping or sealing many curved or irregular surfaces.
- Excellent for many lane and safety marking applications.
- Ideal for color coding, abrasion protection, decoration and splicing applications.

---

## Shelf Life

To obtain best performance, use this product within 18 months from date of manufacture and store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton.

# 3M™ Vinyl Tape

471

---

## For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550 or visit [www.3M.com/industrialtape](http://www.3M.com/industrialtape). 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

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors 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.

---

## Warranty and Limited Remedy

Unless stated otherwise in 3M's product literature, packaging inserts or product packaging for individual products, 3M warrants that each 3M product meets the applicable specifications at the time 3M ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If the 3M product is defective within the warranty period, your exclusive remedy and 3M's and seller's sole obligation will be, at 3M's option, to replace the product or refund the purchase price.

---

## Limitation of Liability

Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



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



**Industrial Business  
Industrial Adhesives and Tapes Division**

3M Center, Building 21-1W-10, 900 Bush Avenue  
St. Paul, MN 55144-1000



*Recycled Paper  
40% pre-consumer  
10% post-consumer*

Printed in U.S.A.  
©3M 2003 70-0709-4452-8 (4/03)