



# Vinyl Tape

## 471 • 4712 (Linered)

Technical Data

April, 2010

### Product Description

3M™ Vinyl Tape 471 and 4712 are a conformable colored (9 colors plus transparent) tapes made from vinyl backing with rubber adhesive. They are ideal for many lane and safety markings, color coding, abrasion protection, masking, sealing, splicing and other general purpose applications.

3M vinyl tape 4712 is a linered version of 3M vinyl tape 471 that may be used for die cutting or large area applications.

### Product Construction

| Product             | Adhesive | Color   | Standard Roll Length |
|---------------------|----------|---|----------------------|
| 3M™ Vinyl Tape 471  | Rubber   | Yellow, white, red, black, brown, green, orange, purple, blue and transparent | 36 yds. (33 m)       |
| 3M™ Vinyl Tape 4712 | Rubber   | Yellow, white, red, black, brown, green, orange, purple, blue and transparent | 36 yds. (33 m)       |

### Typical Physical Properties

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

#### ASTM Test Method

#### Properties for all colors except transparent:

|  |                                  |                   |
|--|----------------------------------|-------------------|
| Adhesion to Steel:                     | 23 oz./in. width (25 N/100 mm)   | D-3330            |
| Tensile Strength at Break:             | 14 lbs./in. width (270 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 (0.14 mm)               | D-3652            |
| Liner Thickness: (3M™ Vinyl Tape 4712) | 2.5 mils (0.6 mils)              | D-3652            |
| Temperature Use Range:                 | 40° to 170°F (4° to 77°C)        |                   |
| Low Leachable Halogen and Sulfur:      | Passes                           | MIL-STD-2041D(SH) |

#### Properties for transparent:

|  |                                  |        |
|--|----------------------------------|--------|
| Adhesion to Steel:                     | 26 oz./in. width (28 N/100 mm)   | D-3330 |
| Tensile Strength at Break:             | 14 lbs./in. width (270 N/100 mm) | D-3759 |
| Elongation at Break:                   | 150%                             | D-3759 |
| Backing Thickness:                     | 4.1 mils (0.10 mm)               | D-3652 |
| Total Tape Thickness:                  | 5.2 mils (0.14 mm)               | D-3652 |
| Liner Thickness: (3M™ Vinyl Tape 4712) | 2.5 mils (0.6 mils)              | D-3652 |
| Temperature Use Range:                 | 40° to 170°F (4° to 77°C)        |        |

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## Features

- Pigmented backings maintain their vivid colors even when exposed to heavy abrasion.
- Can be sold to Commercial Item Description A-A-1689 Type I & II
- Conformability and dead stretch properties are ideal for taping, wrapping or sealing many curved, convex, or irregular surfaces.
- Rubber adhesive provides good adhesion to many surfaces for easier application and excellent holding strength.
- Sharp colors for color coding or marking systems, draw attention and help enhance plant safety.
- Clean removal from many surfaces which helps reduce clean-up and labor costs.
- Abrasion resistant and longer potential application life.
- Good solvent resistance for application protection and longer product life.
- 3M™ Vinyl Tape 4712 can be printed using the thermal printing process.

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## Application Ideas

- Excellent for many lane and safety marking applications. When used with an applicator like the M-77 dispenser, 3M™ Vinyl Tape 471 can be quickly applied to define storage and safety areas. The fact that 3M tape 471 is quickly and cleanly removed in most cases makes it a faster, more versatile and less costly option than painting. Using tape for lane marking instead of painting also eliminates the need to ventilate paint solvents from an open area.
- Because they have low leachable halogens and sulfur, 3M™ Vinyl Tapes 471 and 4712 can be used in corrosion sensitive applications like the nuclear and stainless steel industries.
- 3M tape 4712 is great for die cuts and large area masking.
- Printed 3M tape 4712 can extend the range of 3M tape 471 for color coding by allowing multiple colors or identification on one tape.
- 3M tapes 471 and 4712 stretch to seal canisters and other storage containers that require a tight seal.
- Vivid colors of the tapes make them ideal for color coding and decorating.

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## 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 tapes 471 and 4712 resist many common solvents, they 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.

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**Storage** Store under normal conditions of 60° to 80°F (16° to 27°C) and 40 to 60% R.H. in the original carton.

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

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**Technical Information** The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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**ISO 9001:2000**

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