

3M

Vinyl Tape

471 • 4712 (Linered)

Technical Data

February, 2011

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)	

3M™ Vinyl Tape

471 • 4712 (Lined)

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.

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.

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.

3M™ Vinyl Tape

471 • 4712 (Lined)

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

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

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.
------------------------------	--

Product Use	Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.
--------------------	--

Warranty, Limited Remedy, and Disclaimer	Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.
---	---

Limitation of Liability	Except where prohibited by law, 3M 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.
--------------------------------	--

ISO 9001:2008

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2008 standards.



Industrial Adhesives and Tapes Division

3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-362-3550 • 877-369-2923 (Fax)
www.3M.com/industrial



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

3M is a trademark of 3M Company.
Printed in U.S.A.
©3M 2011 70070944528 (2/11)