

### February, 2011

# 3M™ Vinyl Tape 4712 (Linered)

### **Product Description**

3M<sup>™</sup> Vinyl Tape 4712 is a conformable colored (9 colors plus transparent) tape made from vinyl backing with rubber adhesive. It is 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 white, paper linered version of 3M vinyl tape 471 that may be used for die cutting or large area applications.



#### **Product 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<sup>™</sup> Vinyl Tape 4712 can be printed using the thermal printing process.

## **Technical Information Note**

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

## **Typical Physical Properties**

Property	Values		Method
Color	Yellow, white, red, black, brown, green, orange, purple, blue		
Total Tape Thickness	0.14 mm	5.2 mil	ASTM D3652
Backing Thickness	0.1 mm	4.1 mil	ASTM D3652
Adhesive	Rubber		
Liner Thickness	0.6 mm	2.5 mil	ASTM D3652
Low Leachable Halogen and Sulfur	Passes		MIL-STD-2041D(SH)

## **Typical Performance Characteristics**

Property	Values		Method	Dwell/Cure Time	Substrate	Notes
180° Peel Adhesion	2.5 N/cm	23 oz/in	ASTM D3330	Initial	Stainless Steel	12 in/min (300 mm/min)
Tensile Strength	24.5 N/cm	224 oz/in	ASTM D3759			
Elongation at Break	130 %		ASTM D3759			
Temperature Use Range	4 to 77 °C	40 to 170 °F				

## **Available Sizes**

Property	Values	
Standard Roll Length	33 m	36 yd

### Handling/Application Information

### **Application Ideas**

- Excellent for many lane and safety marking applications. When used with an applicator like the M-77 dispenser, 3M<sup>TM</sup> Vinyl Tape 4712 can be quickly applied to define storage and safety areas. The fact that 3M tape 4712 tape 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 it has low leachable halogens and sulfur, 3M™ Vinyl Tapes 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 4712 stretches 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 tape 4712 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.

### Storage and Shelf Life

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

#### **Industry Specifications**

Can be sold to Commercial Item Description A-A-1689 Type I & II

#### **Trademarks**

3M is a trademark of 3M Company.

#### References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/company-us/all-3m-products/~/3M-Vinyl- Tape-4712?N=5002385+3291742583&rt=rud
Safety Data Sheet (SDS)	https://www.3m.com/3M/en_US/company-us/SDS-search/results/? gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=4712 (Linered)

#### **Family Group**

	471	4712 (Linered)	471 (Transparent)	4712 (Linered, Transparent)
Color	Yellow, white, red, black, brown, green, orange, purple, blue	Yellow, white, red, black, brown, green, orange, purple, blue	Transparent	Transparent
Total Tape Thickness (mm)	0.14	0.14	0.14	0.14

Table continued on next page

#### Family Group (continued)

	471	4712 (Linered)	471 (Transparent)	4712 (Linered, Transparent)
Backing Thickness (mm)	0.1	0.1	0.1	0.1
Adhesive	Rubber	Rubber	Rubber	Rubber
Liner Thickness (mm)		0.6		0.6
Tensile Strength (N/cm)	24.5	24.5	24.5	24.5

#### **ISO Statement**

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

#### Information

**Technical Information:** The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and 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. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 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, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 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 for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

