

# Technical Data Sheet

## 3M™ Vinyl Tape 471

### Product Description

3M™ Vinyl Tape 471 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.




### 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.

### 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	Additional Information
Adhesive Type	Rubber	
Color	Yellow, white, red, black, brown, green, orange, purple, blue	
Backing Thickness (mm)	0.1 mm	View 
Test Method: ASTM D3652		
Total Tape Thickness (mil)	5.2 mil	View 
Test Method: ASTM D3652		
Total Tape Thickness (mm)	0.14 mm	View 
Test Method: ASTM D3652		

Backing Thickness	4.1 mil	View 
Test Method: ASTM D3652		
Low Leachable Halogen and Sulfur	Passes	View 
Test Method: MIL-STD-2041D(SH)		

### Typical Performance Characteristics

Property	Values	Additional Information
Tensile Strength	24.5 N/cm	View 
Test Method: ASTM D3759		
180° Peel Adhesion	2.5 N/cm	View 
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
180° Peel Adhesion	23 oz/in	View 
Test Method: ASTM D3330		
Notes: 12 in/min (300 mm/min)		
Tensile Strength	224 oz/in	View 
Test Method: ASTM D3759		
Elongation at Break (%)	130 %	View 
Test Method: ASTM D3759		
Long Term Temp C	77 °C	View 
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	4 °C	View 
Test Condition: Long Term (day, weeks)		
Long Term Temp F	170 °F	View 
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	40 °F	View 
Test Condition: Long Term (day, weeks)		

## Available Sizes

Property	Values	Additional Information
Standard Roll Length	33 m	
Standard Roll Length	36 yd	

## 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

## Bottom Matter

3M  
Industrial Adhesives and Tapes Division  
3M Center, Building 225-3S-06  
St. Paul, MN 55144-1000  
800-362-3550

## Trademarks

3M is a trademark of 3M Company.

## Handling/Application Information

### Application Examples

- 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 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 471 can be used in corrosion sensitive applications like the nuclear and stainless steel industries.
- 3M tape 471 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 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.

## References

Property	Values
3m.com Product Page	<a href="https://www.3m.com/3M/en_US/p/d/b40071909/">https://www.3m.com/3M/en_US/p/d/b40071909/</a>
Safety Data Sheet SDS	<a href="https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=471">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=471</a>

## Family Group

Link Tags:

- 471
- 4712 (Lined)
- 471 (Transparent)
- 4712 (Lined, Transparent)

Products	Adhesive Type	Color	Liner Thickness	Backing Thickness (mm)	Long Term Temp C	Minimum Long Term Temperature Resistance	Long Term Temp F	Tensile Strength	Total Tape Thickness (mm)
4712 (Lined)	Rubber	Yellow, white, red, black, brown, green, orange, purple, blue	0.08 mm	0.1 mm	77 °C	4 °C	170 °F	N/A	N/A
471	N/A	Yellow, white, red, black, brown, green, orange, purple, blue	N/A	0.1 mm	N/A	N/A	170 °F	N/A	0.14 mm
471 (Transparent)	N/A	N/A	N/A	N/A	N/A	N/A	170 °F	24.5 N/cm	0.14 mm
4712 (Lined, Transparent)	N/A	Transparent	0.08 mm	0.1 mm	77 °C	4 °C	170 °F	24.5 N/cm	0.14 mm

## 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.

**Disclaimer:** 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions,

warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit [www.3M.com](http://www.3M.com).