

English Last Revision Date: July, 2003

Technical Data Sheet

3M[™] Heavy Duty Protective Tape 346

Product Description

3M[™] Protective Tape 346 is a heavy duty natural colored flat stock paper tape for indoor and outdoor protection of many metals, plastics and materials in transit and features a heavy duty weather resistant backing.

Product Features

• Heavy flat stock backing that is abrasion and moisture resistant and filters U.V. rays.

• Rubber adhesive that is stain and transfer resistant and long aging to help reduce clean up and can be used for long periods of time (up to 6 months) and still provide reasonably) clean removal under most conditions.

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

Additional Information

Adhesive Type	Rubber	
Color	Tan	
Backing Thickness (mm)	0.38 mm	View ^
Test Method: ASTM D3652		
Total Tape Thickness (mil)	16.7 mil	View ^
Test Method: ASTM D3652		
Total Tape Thickness (mm)	0.42 mm	View ^
Test Method: ASTM D3652		
Backing Thickness	15 mil	View ^



Test Method: ASTM D3652

Typical Performance Characteristics

Property	Values	Additional Information	
Tensile Strength	49 N/cm	View 🔨	
Test Method: ASTM D3759			
180° Peel Adhesion	2.4 N/cm	View ^	
Test Method: ASTM D3330			
Notes: 12 in/min (300 mm/min)			
180° Peel Adhesion	22 oz/in	View ^	
180° Peel Adhesion Test Method: ASTM D3330	22 oz/in	View ^	
	22 oz/in	View ^	
Test Method: ASTM D3330	22 oz/in	View ^	
Test Method: ASTM D3330	22 oz/in 448 oz/in	View View	
Test Method: ASTM D3330 Notes: 12 in/min (300 mm/min)			
Test Method: ASTM D3330 Notes: 12 in/min (300 mm/min) Tensile Strength			

Test Method: ASTM D3759

Long Term Temp C	38 °C	View ^
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	16 °C	View ^
Test Condition: Long Term (day, weeks)		
Long Term Temp F	100 °F	View ^
Test Condition: Long Term (day, weeks)		
Minimum Long Term Temperature Resistance	60 °F	View ^
Test Condition: Long Term (day, weeks)		
Available Sizes		
Property	Values	Additional Information
Standard Roll Length	55 m	
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Standard Roll Length

Storage and Shelf Life

Store in a clean, dry environment between 60-80°F (15-27°C) and 40-50% relative humidity. Not recommended to exceed one year from date of manufacture

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. 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.

Bottom Matter

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

Handling/Application Information

Application Examples

- Protection of boat deck and interior cabin surfaces during building, finishing, refurbishing.
- Steel tank protection during fabrication/welding.
- Protection of aircraft parts and surfaces (e.g., wings, windows, etc.) during maintenance, storage, shipping.
- Indoor and outdoor protection of metals and plastics.
- Protection of materials in transit from abrasion damage caused by movement within shipping containers (e.g., outdoor motors).

Application Techniques

- Not designed for paint masking or sand blast operations.
- Prolonged exposure to water and abrasion can cause backing to wear away.
- Be careful with materials which contain copper and brass. Staining may result along with difficult removal after aging.
- Recommended outdoor exposure limited to six months. Exposures in excess of six months should be thoroughly tested by the user.

• Stacking pressures and repeated foot traffic, and high storage temperatures can cause adhesion build-up. Under such conditions, the tape should be checked periodically to determine ease of tape removal from substrate.

- Thoroughly check on all painted surfaces to guard against stain.
- Avoid solvent spills. Acetone, mineral spirits, lacquer thinners, etc. can cause staining, adhesive oozing and backing separation.
- Test for clean removal on all anodized aluminum surfaces. Improper sealing of surface causes adhesive transfer.

• The surface to which tape is to be applied should be clean and free of all traces of oil and moisture. For best results, the tape should not be applied to surfaces below 60°F (15°C) or above 100°F (38°C)

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40069168/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/? gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=346



Family Group							
Link Tags:							
346							
						Minimum Long	
Products	Backing	Color	Backing Thickness (mm)	Total Tape Thickness (mm)	Tensile Strength	Term	Long Term Temp
						Temperature	F
						Resistance	
346	Flat Paper Stock	Tan	0.38 mm	0.42 mm	49 N/cm	16 °C	100 °F

ISO Statement

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

Information

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