



# Technical Data Sheet

3M<sup>™</sup> Heavy Duty Protective Tape 346



Last Revision Date: July, 2003

English

Product Details

Regulatory Info/SDS

# Product Description

3M<sup>™</sup> 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**

Attribute Name	Test Method	Value
Color		Tan
Adhesive Type		Rubber
Backing		Flat Paper Stock
Backing Thickness	ASTM D3652	0.38 mm (15 mil)
Total Tape Thickness	ASTM D3652	0.42 mm (16.7 mil)

# **Typical Performance Characteristics**

Attribute Name	Test Method	Temperature	Value	
180° Peel Adhesion	ASTM D3330	22 °C (72 °F)	2.4 N/cm (22 oz/in) <sup>1</sup>	
Elongation at Break	ASTM D3759		4 %	
Tensile Strength	ASTM D3759		49 N/cm (448 oz/in)	
Long Term Temperature			38 °C (100 °F) 2	
Resistance			58 C (100 F) -	
Minimum Long Term			16 °C (60 °F) <sup>2</sup>	
Temperature Resistance				

1 12 in/min (300 mm/min)

<sup>2</sup> Long Term (day, weeks)

# 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)

### 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

#### **Available Sizes**

Attribute Name	Value
Standard Roll Length	55 m (60 yd)

#### **Information**

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## ISO Statement

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

#### **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.

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