

March, 2003

## 3M™ Scotch® Bi-Directional Filament Tape 8959

### Product Description

Scotch® Filament Tape 8959 is a bi-directional specialty packaging tape reinforced with continuous glass yarns in both the longitudinal and transverse direction along with a biaxially oriented polypropylene backing. The polypropylene backing provides good abrasion, moisture and scuff resistance. The adhesive is specifically formulated to provide good adhesion to a wide variety of surfaces including metallic, plastic, and fiberboard.

### Product Features

- High cross-direction tensile strength.
- Allows printing and illustrations to be seen through the tape.
- Excellent shear and initial adhesion.
- Excellent aging.
- Protection of filaments and adhesive to provide longer package life.
- Performs better than paper backings when exposed to outdoor and humid environments.
- Resists center seams slitting in both machine and cross direction, increasing the performance of the tape.
- Excellent holding power under wide range of application conditions with minimum amount of tape.
- Hold with minimum rubdown, doesn't require water to activate.
- Boxes remain closed for long periods of time.



### 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
Backing Color	Clear		
Total Tape Thickness	0.14 mm	5.7 mil	ASTM D3652
Backing	3M™ Scotchpro™ film		
Adhesive	Pressure sensitive synthetic rubber-resin		
Reinforcement	Bi-directional glass yarn		

### Typical Performance Characteristics

180° Peel Adhesion		Backing	Notes	Substrate
11 N/cm	100 oz/in	2 mil Aluminum Foil	12 in/min (300 mm/min) 72 hr dwell on Stainless Steel	
109 N/100mm				Stainless Steel

Property: 180° Peel Adhesion  
Method: ASTM D3330

Tensile Strength		
260 N/cm	2600 N/100mm	150 lb/in

Property: Tensile Strength  
Method: ASTM D3759

**Elongation at Break:** 6 %

**Methods**  
ASTM D3759

### Handling/Application Information

#### Application Techniques

An extensive line of application equipment is available including portable hand-held dispensers and stationary definite-length dispensers. Application of Scotch® Filament Tape 8959 is most easily accomplished at room temperature. At colder temperatures, approaching 32°F (0°C), the adhesive becomes firm. Once applied, Scotch® Tape 8959 performs well throughout the normal temperature ranges typically encountered by packaged products in shipping and storage environments.

#### Storage and Shelf Life

Store behind present stock. Store in a clean, dry place. Temperature of 40-80°F (4-26°C) and 40-50% relative humidity are recommended. Rotate your stock. To obtain best performance, use this product within 18 months from date of manufacture

## References

Property	Values	Method
3m.com Product Page	<a href="https://www.3m.com/3M/en_US/company-us/all-3m-products/~-/Scotch-Bi-Directional-Filament-Tape-8959?N=5002385+3293242300&amp;rt=rud mil">https://www.3m.com/3M/en_US/company-us/all-3m-products/~-/Scotch-Bi-Directional-Filament-Tape-8959?N=5002385+3293242300&amp;rt=rud mil</a>	ASTM D3652
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=8959 in">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=8959 in</a>	ASTM D3652

## 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/packaging](http://www.3M.com/packaging). Address correspondence to: 3M Industrial Adhesives and Tapes Division, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55106. Our fax number is 651-733-9175. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

## Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

## Information

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