

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              | Biaxial Oriented Polypropylene(BOPP)      |         |            |
| Adhesive Type        | Pressure sensitive synthetic rubber-resin |         |            |
| Fiber Reinforcement  | Bidirectional Glass Yarn                  |         |            |

## Typical Performance Characteristics

| 180° Peel Adhesion |           | Notes                  | Substrate       |
|--------------------|-----------|------------------------|-----------------|
| 11 N/cm            | 100 oz/in | 12 in/min (300 mm/min) |                 |
| 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  |
|-----------------------|---|
| 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">https://www.3m.com/3M/en_US/company-us/all-3m-products/-/Scotch-Bi-Directional-Filament-Tape-8959/?N=5002385+3293242300&amp;rt=rud</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=8959">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=8959</a>                       |

## 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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