



Technical Data Sheet

3M™ Polyester Tape 853



[Product Details](#)



[Regulatory Info/SDS](#)

Product Description

3M™ Polyester Tape 853 is comprised of strong, thin polyester backing with high shear, solvent resistant acrylic adhesive. These qualities make this tape ideal for applications where solvent exposure is a concern. It produces a reliable bond to a wide variety of substrates. The overall thinness this tape makes it ideal for splicing.

Product Features

- Can be qualified to meet Federal Spec. L-T-100 Type I.
- Meets flammability requirements of FAR 25.853(a) Appendix F Part I (a)(1)(ii).
- Polyester backing provides strength without thickness.
- Transparent backing allows visibility of information protected by the tape.
- Acrylic adhesive is resistant to many solvents including jet engine fuel, hydraulic fluid, and lubricating oils.
- Tape has excellent shear holding.
- Versatile adhesive sticks to a wide variety of substrates.
- Low moisture vapor transmission rate.

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		Transparent
Adhesive Type		Acrylic
Backing		Polyester
Backing Thickness	ASTM D3652	0.03 mm (1.1 mil)
Total Tape Thickness	ASTM D3652	0.06 mm (2.2 mil)
Water Vapor Transmission	ASTM D3833	15.5 g/m ² /24 h (1 g/100 in ² /24 h)

Typical Performance Characteristics

Attribute Name	Test Method	Temperature	Value
180° Peel Adhesion	ASTM D3330	22 °C (72 °F)	5 N/cm (46 oz/in) ¹
Elongation at Break	ASTM D3759		83 %
Tensile Strength	ASTM D3759		43.4 N/cm (25 lb/in)
Long Term Temperature Resistance			150 °C (300 °F) ²
Minimum Long Term Temperature Resistance			-50 °C (-60 °F) ²

¹ 12 in/min (300 mm/min)

² Long Term (day, weeks)

Handling/Application Information

Application Examples

- High tension splicing application.
- Critical label protection.
- Tape hinge.
- Aerospace applications that require FAR flammability rating.
- Sealing critical area from moisture intrusion.

Industry Specifications

Can be qualified to meet Federal Spec. L-T-100 Type I Federal Spec. L-T-100 Type I.
FAR 25.853(a) Appendix F Part I (a)(1)(ii).

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 18 months from date of manufacture.

Available Sizes

Attribute Name	Value
Standard Roll Length	65.8 m (72 yd)

Information

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ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

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