

3M™ Polyester/Silicone Tape 851ST

Product Description

3M™ Polyester/Silicone Tape 851ST is a green polyester tape with a silicone adhesive designed for powder coating and other high temperature masking applications.

Features and Benefits

- Abrasion, chemical and thermal resistant
- Removes cleanly from stainless steel after 30 min at 218°C (425°F)
- Higher heat resistance as compared with acrylics
- Easy and clean removability
- Polyethylene tape core instead of cardboard

Product Construction/Material Description

3M™ Polyester/Silicone Tape 851ST	
Color	Green
Backing	Polyester film
Adhesive	Silicone
Standard Roll Length	50 m (55 yd)

Applications

- Masking edges of overlap seams in metal bonding process where the excess epoxy (“flash”) flows onto the tape. Clean-up is virtually complete when the tape is removed.
- Protective overall mask on panels subject to mild caustic or acid bath etching and to help prevent scratches during handling prior to bonding operations.
- Holding of parts or vacuum bags during bonding operation.
- Mask for metal in acid or caustic chemical milling baths.
- Paint mask for areas subject to high temperature bake cycles.
- Splicing of silicone liners and papers.
- Splicing of films subject to high temperatures.



Typical Physical Properties

Note: The following technical information and data should be considered representative or typical only, and should not be used for specification purposes.

3M™ Polyester/Silicone Tape 851ST		
Property	Method	Value
Adhesion to Steel	D-3330	30 oz/in width (33 N/100 mm)
Tensile Strength at Break	D-3579	23 lb/in width (403 N/100 mm)
Elongation at Break	D-3579	80%
Backing Thickness	D-3652	1.5 mil (0.038 mm)
Total Tape Thickness	D-3652	2.4 mil (0.060 mm)
Temperature Use Range	—	Removes cleanly and remains flexible after 30 min at 218°C (425°F)

Storage and Shelf Life

The shelf life of 3M™ Polyester/Silicone Tape 851ST is 12 months from the date of manufacture when stored in original cartons at 21°C (70°F) and 50% relative humidity.

Regulatory

For regulatory information about this product, contact your 3M representative.

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

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