



Low-Static Film Tape

857

Technical Data

December, 1994

Product Description

3M 857 Low-Static Film Tape, is a transparent polyester film tape with acrylic adhesive . Made with proprietary technology, the tape generates extremely low levels of electrostatic discharge when it is unwound from the roll and also when removed from most surfaces on which it is placed.

The tape is supplied on 72 yard rolls in widths from 1/2 in. to 2in (12.70 mm to 50-88 mm)

Typical Properties

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

Property/Unit of measure	Typical Value	Test Method
ELECTRICAL PROPERTIES		
Static charge generation:		
Removal from roll 10% RH. Volts	20	3M
Removal from roll 50% RH. Volts	5	3M
Removal from stainless steel, 10% RH. Volts	50	3M
Removal from stainless steel, 50% RH. Volts	5	3M
Surface resistance:		
Removal from stainless steel, 50% RH. Volts	5 X 10 ²	ESD Assoc. STD 11.11
Removal from stainless steel, 50% RH. Volts	5 X 10 ²	ESD Assoc. STD 11.11
TAPE PROPERTIES:		
Adhesion to steel. Oz/in.	19	ASTM D-1000
Unwind force from roll. Oz/in	24	ASTM D-1000
Thickness, mils	2.2	ASTM D-1000
Break strength, lb./in	20	ASTM D-1000
Slit width, in.	± 1/64	ASTM D-1000
Rolling ball tack, mm	70	ASTM D-1000
Non-outgassing:		
TML	<1.0%	ASTM E-595
CVCM	<0.1%	ASTM E-595

Patented Technology

- 3M Low-Static Film Tape, with a proprietary technology, generates extremely low levels of triboelectric charge when it is unwound from the roll and also when removed from most surfaces on which it is placed.
- 857 tape generates less than 50 volts on unwind and removal from stainless steel. It generates very low levels of static change even in dry conditions of 10% R.H.

Low-Static Film Tape

857

Printed for Protection • The tape is printed on the adhesive side with the 3M logo and the ESD Association's ESD Protective Symbol.

Application Ideas • For holding, sealing, masking, protecting, packaging and attaching
• Use with static sensitive material or in static sensitive areas.

Features	Advantages	Benefits
• Patented acrylic adhesive	• Low static properties • Firm, long aging	• Reduces triboelectric charge that can cause damage or discomfort • Reduces failure caused by adhesive oozing and loss of tack
• Printed polyester film backing	• Abrasion resistant • Moisture, chemical and solvent resistant • Printed with ESD association symbol	• Helps provide surface protection from abrasion and rough handling • Helps reduce rejects produced from chemical, solvent or moisture attack • Identifies as a low static product

Important Notice

3M MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a 3M ITSD product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M ITSD product. Given the variety of factors that can affect the use and performance of a 3M ITSE product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M ITSD product to determine whether it is fit for a particular purpose and suitable for the user's method application.

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-227-5085. Address correspondence to : 3M Industrial Tape and Specialties Division, 3M Center, Building 220-7E-01, St. Paul, MN 55144-1000. Our fax number is 612-733-5412. In Canada, phone: 1-519-451-2500. In Puerto Rico, phone: 1-809-750-3000. In Mexico, phone: 5-728-0400

Limitation of Remedies and Liability

If the 3M product is proved to be defective, THE EXCLUSIVE REMEDY, AT 3M'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OF OR TO REPAIR OR REPLACE THE DEFECTIVE 3M PRODUCT. 3M shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including negligence, warranty, or strict liability.



This Industrial Tape and Specialties Division product was manufactured under a 3M quality system registered to ISO 9002 standards.



Industrial Tape and Specialties Division

3M Center, Building 220-7E-01
St. Paul, MN 55144-1000
USA
1 800.722.5463
1 800.223.7427 Fax On Demand
www.3M.com