

# 3M™ Low Static Polyimide Film Tape 7419

## Product Description

3M™ Low Static, Non-Silicone Polyimide Film Tape 7419 with DuPont™ Kapton® polyimide film and acrylic adhesive is amber-colored and used for PCB solder masking and other high temperature applications.

## Features and Benefits

- Specially formulated acrylic adhesive is resistant to typical solder mask temperatures for short periods of time. Stays firmly in place during processing and removes cleanly from typical electronic substrates even after 10 min @ 260°C (500°F).
- Non-silicone adhesive formulation lessens the potential for silicone contamination which can interfere with subsequent bonding or conformal coating operations.
- The high temperature acrylic adhesive also has excellent chemical resistance and should be considered for demanding chemical masking applications.
- Product is wound on a polyethylene tape core.

## Product Construction/Material Description

3M™ Low Static Polyimide Film Tape 7419	
<b>Color</b>	Amber
<b>Backing</b>	Dupont™ Kapton® Polyimide Film
<b>Adhesive</b>	Acrylic
<b>Standard Roll Length</b>	33 m (36 yd)

## Applications

- Masking or protecting residue sensitive areas on printed circuit boards during high temperature operations such as wave soldering and solder reflow.



## 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™ Low Static Polyimide Film Tape 7419		
Property	Method	Value
<b>Adhesion to Steel</b> Initial 72 hrs @ Room Temp 10 min @ 260°C	D-3330, Part A	4 oz/in width (4.52 N/100 mm) 5 oz/in width (5.65 N/100 mm) 17 oz/in width (19 N/100 mm)
<b>Adhesion to Copper</b> Initial 72 hrs @ Room Temp 10 min @ 260°C	D-3330, Part A	4 oz/in width (4.52 N/100 mm) 5 oz/in width (5.65 N/100 mm) 10 oz/in width (11 N/100 mm)
<b>Backing Thickness</b>	D-3652	1.0 mil (0.025 mm)
<b>Total Tape Thickness</b>	D-3652	1.8 mil (0.046 mm)
<b>Static Discharge</b> Removal from roll	—	< 100 volts
<b>Dielectric Strength</b>	—	6000 volts
<b>Surface Resistivity</b>	ESD Method S-11	5 x 10 <sup>6</sup> ohms/sq
<b>Temperature Use Range*</b>	—	10 min at 260°C

\*Temperature use range is defined as the maximum time at the stated temperature after which the 3M tape 7419 may be removed cleanly, without staining, from a copper substrate.

## General Information

- Splice-free maximum roll length is 36.1 yd -0/+2 yd (33 m -0/+2 m).
- Typical slit roll width tolerance: target ± .031 in (± 0.8 mm).
- Product provided on plastic polyethylene cores and individually packed.  
Core ID = 3.020 in ± .004 in (76.7 mm ± 0.1 mm).
- Substrate should be smooth, clean, dry and oil-free to ensure good wet-out and adequate adhesion.
- Tape may not bond or conform to low surface energy, rough or sharply curved surfaces.

## Storage and Shelf Life

To obtain best performance, use this product within 18 months from date of delivery and store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original carton.

## Safety Data Sheet

Consult Safety Data Sheet before use.

## 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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