



# **Technical Data Sheet**

3M<sup>™</sup> Polyester Tape 8402

English-US Last Revision Date: August, 2024

Supersedes: August, 2024



Regulatory Info/SDS

Product Details

# **Product Description**

3M<sup>™</sup> Polyester Tape 8402 is a film tape with a silicone adhesive for holding down bagging materials and parts during composite and metal bonding operations. Ideal for splicing applications on surfaces that are difficult to adhere too, such as silicone coated papers and films.

## **Product Features**

- Works in demanding conditions and retains flexibility in autoclave conditions in temperatures ranging from -60°F (-50°C) to 350°F (176°C)
   Higher heat resistance as compared with acrylics
- Silicone adhesive provides clean removal from a variety of surfaces
- Translucent green backing is easily identifiable for splicing applications
  Chemical resistant adhesive and backing provides durability in difficult environments

## **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                |             | Translucent green  |
| Adhesive Type        |             | Silicone           |
| Backing              |             | Polyester          |
| Backing Thickness    | ASTM D3652  | 0.02 mm (0.92 mil) |
| Total Tape Thickness | ASTM D3652  | 0.05 mm (1.9 mil)  |

## **Typical Performance Characteristics**

| Attribute Name      | Test Method | Temperature   | Value                            |
|---------------------|-------------|---------------|----------------------------------|
| 180° Peel Adhesion  | ASTM D3330  | 22 °C (72 °F) | 2.5 N/cm (23 oz/in) <sup>1</sup> |
| Elongation at Break | ASTM D3759  |               | 125 %                            |
| Tensile Strength    | ASTM D3759  |               | 43.8 N/cm (25 lb/in)             |

<sup>1</sup> 12 in/min (300 mm/min)

| Attribute Name                           | Value   |
|--|---|
| Temperature Use Range note               | Removes cleanly and remains flexible after 3 hours, 350°F |
|  | (177°C), in autoclave.                                    |
| Long Term Temperature Resistance         | 177 °C (350 °F) <sup>1</sup>                              |
| Minimum Long Term Temperature Resistance | -60 °C (-50 °F) 1   |

<sup>1</sup> Long Term (day, weeks)

## Handling/Application Information

#### **Application Examples**

- Flash breaker in metal bonding processes where the excess epoxy (flash) flows on the tape.
- Holding of bagging materials and parts during metal or composite bonding operations.
- Masking metal surfaces in acid or caustic chemical milling, etching, or anodization baths.
- Protective tape reduces scratches during handling and shipping.
- Paint mask for areas subject to higher temperature bake cycles.
- Splicing applications on surfaces that are difficult to adhere too, such as silicone coated papers and films.
- Splicing of films subject to high temperatures or chemicals.

#### 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 12 months from date of manufacture.

#### Available Sizes

| Attribute Name       | Value        |
|----------------------|--------------|
| Standard Roll Length | 66 m (72 yd) |

#### **Information**

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### ISO Statement

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