3M

# Polyester Tape
854

## Technical Data

**Product Description**

3M™ Polyester Tape 854 is an oqaque, cream-colored polyester tape with excellent chemical resistance in precious metal plating, especially gold.

**Product Construction**

| Backing | Adhesive | Color | Standard Roll Length |
|---|---|---|---|
| Polyester | Rubber | Cream | 72 yds. (66 m) |

**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.**

| | | ASTM Test Method |
|---|---|---|
| Adhesion to Steel: | 59 oz./in. width (64 N/100 mm) | D-3330 |
| Tensile Strength at Break: | 29 lbs./in. width (509 N/100 mm) | D-3759 |
| Elongation at Break: | 123% | D-3759 |
| Backing Thickness: | 1.0 mil (0.03 mm) | D-3652 |
| Total Tape Thickness: | 2.7 mils (0.065 mm) | D-3652 |
| Water Vapor Transmission Rate: | 1.6 gms $H_2O$/100 sq. in./24 hrs. (24.8 g/$m^2$ 24 h) | |

**Features**

- Polyester film backing imparts excellent chemical and thermal stability.
- Remains flexible at -60°F (-50°C) and retains dimensional stability up to 300°F (149°C).
- Resists many solvents typically found in photographic, electroplating and chemical milling processes. **Note:** Hot caustics will weaken the backing after prolonged immersion.
- Extended periods of exposure to elevated temperatures or outdoor conditions will cause an increase in bond strength. During this exposure, however, the film can become brittle and lose its tensile strength.
- Roll stability is excellent up to one year.

**Application Ideas**

- Chemical resistance in precious metal plating, especially gold.
- Protection in sodium hydroxide etching of aluminum.
- Protection of substrates during chemical milling.
- General splicing.

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**Storage**

Store under normal conditions of 70°F (21°C) and 50% R.H. in the original carton.

**Shelf Life**

To obtain best performance, use this product within 18 months from date of manufacture.

**Product Use**

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

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ISO 9001:2000

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.

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**Industrial Business**
**Industrial Adhesives and Tapes Division**

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