



POLYPEEL™
**Peelable
Polyester Heat
Shrink Tubing**

Experience the world's thinnest, smallest, and strongest heat shrink tubing. Nordson MEDICAL's polyester (PET) heat shrink tubing is ultra-thin-walled, high-strength, and available in optically clear or pigmented options. Developed specifically for the medical device industry, it has been at the forefront of medical device tubing innovation since its creation. Now, with our new patent-pending peelable polyester heat shrink tubing technology, you get all the same benefits of the product you already know and trust—plus the added advantage of easy removal. Simply make 1/4" incisions on one end of the tubing to achieve excellent peelability from one end to the other.

FEATURES & BENEFITS

- Provides a PFAS-free alternative for reflow processing and catheter masking
- Ultra-thin walls compared to FEP heat shrink, ideal for masking applications as a manufacturing aid
- High strength supports mid-process device containment, such as stent crimping
- Enables easy removal to reduce scrap caused by substrate flaws
- Masks catheter sections for seamless, discrete coating applications
- Maintains tight-tolerance bundling of multiple devices for sleeve insertions
- Preserves profiles of packaged or in-process delivery systems, balloons, and implants

SPECIFICATIONS

- Ultra-thin walls, ultra-high strength, and high dielectric strength
- Tensile strength up to and exceeding 20,000 psi, depending on tubing design
- One of the highest dielectric strength ratings among thermoplastics (>4,000 V/mil at 60Hz)
- Can be recovered at relatively low temperatures
- Axial shrinkage pulls components together
- Can be transformed into custom shapes by drawing/shrinking onto a mandrel (conical, square, triangular, etc.)
- Heat-settable for stability up to a prescribed temperature
- Available in clear, white, and black (other colors may be available upon request)
- Can be printed for shaft marking or indication
- Surface treatment (plasma etching, corona treating, or mechanical roughening) recommended for bonding with adhesives
- Can be sterilized with ethylene oxide, gamma radiation, e-beam, and autoclaving (repeat autoclaving not recommended)
- Meets USP Class VI and ISO 10993 requirements

Peelable Polyester Heat Shrink Tubing

PROCESSING GUIDELINES

Sizing

- Inner diameter range: 0.006" - 0.190" (0.015 mm - 4.8 mm)
- Wall thickness range: 0.0001" - 0.001" (0.0025 mm - 0.0254 mm)
- Tight fit is best: 25% gap or less*
- Heat shrink ratios: 1.1:1 up to 3:1**

Reflow Settings

- Material heat shrink temperature range: 185°F to 374°F (85°C to 190°C)
- Material melting peak temperature: 491°F (255°C)
- Recommended hot box range: 300°F to 428°F (149°C to 220°C)

Material Compatibility

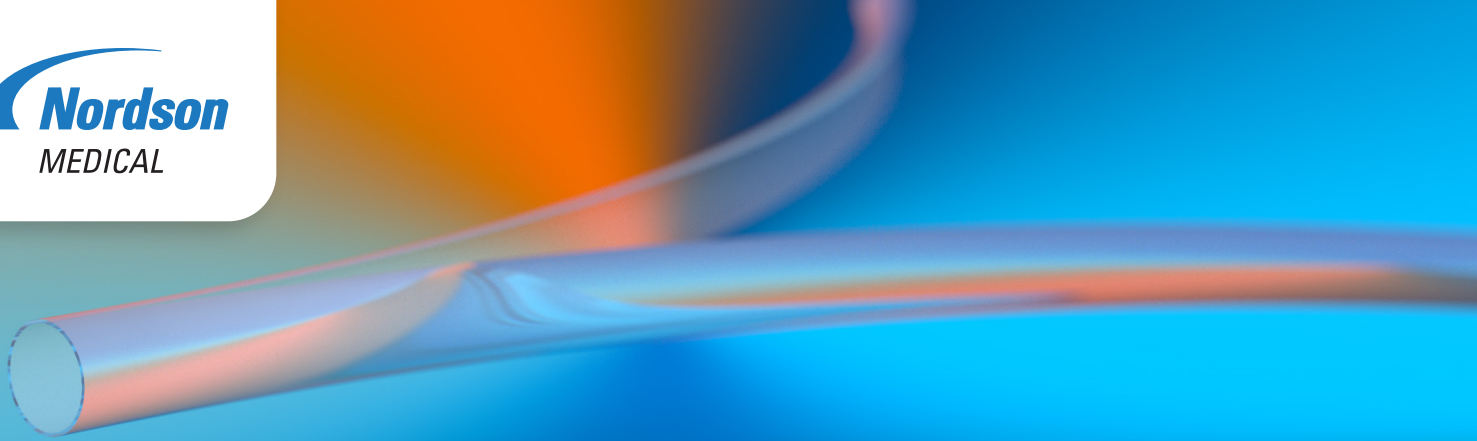
PET releases easily from most common thermoplastics. However, some low-durometer urethanes tend to tack to the PET and may require a resting period (~1hr) or may not be compatible. Run test samples with these materials

***NOTE:** PET should be sized no larger than 25% above the maximum diameter of your part. Recommended approach is to use a heat shrink tube with a minimum expanded ID that just clears the maximum diameter of your part.

****NOTE:** Recovery >20% can be achieved by drawing or holding the ends of the heat shrink as it is heated.

OPTIMIZED FOR MANUFACTURING

- Proof of concept demonstrated: peels cleanly without breaking into pieces
- Minimal difference from the existing PET heat shrink manufacturing process
- Compatible with current production equipment
- Extremely smooth interior surface finish transfers to processed components
- Enables easy tubing removal when used as a manufacturing aid
- Combines low-temperature recovery, high strength, and ultra-thin walls for unique processing applications



PEELABLE **PET Heat Shrink Tubing**

Nordson MEDICAL is already known for having PET heat shrink tubing with the thinnest walls and strongest performance. With our new peelable PET heat shrink tubing technology, you'll find all the same benefits as the product you already know and love with the added capability of an easy removal process. Perform 1/4" incisions on one end of the tubing and achieve excellent peelability from one end to another.

WHY PEELABLE PET HEAT SHRINK?

- Much thinner walls compared to FEP heat shrink benefits masking applications as a manufacturing aid
- High strength for mid-process device containment as a manufacturing aid for stent crimping, etc.
- Easy removal if needed to reduce scrap caused by flaws in the device substrate

CAPABILITIES

- Proof of concept of peelable PET heat shrink has been demonstrated. The tubing easily peels longitudinally without breaking off into pieces
- Very little difference to the existing PET Heat Shrink manufacturing process
- Existing production equipment used