

PolyPeel™

PEELABLE POLYESTER HEAT SHRINK TUBING

Effortless removal starts here—introducing Nordson MEDICAL's peelable polyester heat shrink tubing, engineered to save time, reduce risk, and protect your device.

Whether used as a manufacturing aid or removed post-process, our patent-pending peelable technology eliminates the hassle of traditional tubing removal. A simple ¼" incision is all it takes to achieve smooth, longitudinal peelability—streamlining production and safeguarding your substrate.

PFAS-Free Alternative for Reflow Processing and Catheter Masking

FEATURES & BENEFITS

- Provides a PFAS-free alternative for reflow processing catheter masking and in-process wrapping/bundling
- Ultra-thin walls (compared to FEP heat shrink) are ideal for masking catheter sections, enabling seamless and discrete coating applications as a manufacturing aid
- High strength supports mid-process device containment as a manufacturing aid for stent crimping, etc.
- Enables easy removal and reduces scrap caused by skiving substrate flaws
- 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 and high dielectric strength
- One of the highest dielectric strength ratings among thermoplastics (>3,400 V/mil)
- 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.)
- 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 ISO 10993 requirements

PROCESSING GUIDELINES

Sizing

- Inner diameter range: 0.080" - 0.300" depends on wall thickness (typical standard tolerance $\pm 5\%$)
- Wall thickness range: 0.00025" - 0.00050" (typical standard tolerance ± 0.0001 ")
0.0006" - 0.0010" (typical standard tolerance $\pm 20\%$)
- Tight fit is best: 15% gap or less*
- Heat shrink ratios: At least 1.1:1

Reflow Settings

- Material heat shrink temperature range: 185°F - 374°F (85°C - 190°C)
- Material melting peak temperature: 489°F (254°C)
- Suggested temperature range is from 365°F - 455°F (185°C - 235°C) (depends on jacket materials)**

Material Compatibility

- Peelable polyester heat shrink tubing releases easily from most common thermoplastics, such as Pebax and Polyamide.

Colors

- Available in clear (translucent), black, and blue.

***NOTE:** Peelable polyester heat shrink tubing should be sized no larger than 15% 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:** For starting point purpose. Other reflow parameters may be suitable, such as higher temperature and fast speed, depending on reflow equipment capability, setup conditions and desired design outputs. Reflowing under constrained conditions and applying cool air right after reflowed may further enhance the effect of peelability after reflowing.

OPTIMIZED FOR MANUFACTURING

PolyPeel™ Peelable Polyester Heat Shrink Tubing

An easy to remove PFAS-free alternative for multiple manufacturing aid applications!

- The tubing easily peels longitudinally—end to end
- Recommended pre-slit on one end before applying heat shrinkage process
- Extremely smooth interior surface finish transfers to processed components
- Combines low-temperature recovery, and ultra-thin walls for unique processing applications