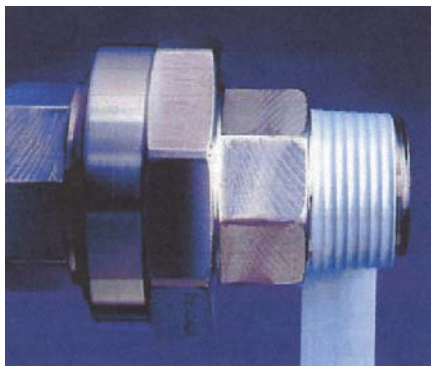


# ResTape™ Stainless Steel Thread-Seal Teflon® Tape

A nickel impregnated, PTFE thread-sealing tape designed for stainless steel fittings.

cat.# 22487



## Description

ResTape™ Stainless Steel Thread-Seal Teflon® Tape is a new and unique thread-sealing tape which prevents stainless steel fittings galling or seizing during assembly or disassembly. The tape is impregnated with nickel powder which acts like bearing plates, keeping the surface of the male and female threads apart. Further protection is provided by the thicker and denser than average composition of ResTape™ Stainless Steel Thread-Seal Teflon® Tape. The added thickness and density also ensure an effective seal.

## Characteristics

- Compatible with a wide range of gases and liquids
- Compatible with a wide range of piping materials
- Will not harden or crack on the joint
- No curing time
- Effective across a broad range of temperatures
- Non-toxic
- Non-flammable
- Clean
- Unlimited shelf life



## Applications

ResTape™ Stainless Steel Thread-Seal Teflon® Tape is recommended for stainless steel pipe and fittings but also is compatible with the following piping materials:

- Galvanized steel
- Iron
- Brass
- Copper
- Aluminum
- Fiberglass
- Polyethylene
- Polypropylene
- PVC
- CPVC
- ABS

It can be used on pipes carrying the following materials:

- Acids, concentrated or dilute (see precautions)
- Air, compressed
- Alcohols
- Aliphatic solvents
- Ammonia, liquid
- Aromatic solvents
- Caustics, concentrated or dilute (see precautions)
- Chlorinated solvents
- Cutting oils
- Diesel fuel oil
- Ethylene glycol
- Fatty acids
- Gasohol
- Glycerin
- Heating oils
- Hydraulic fluids
- Hydraulic oils
- Hydrogen, gaseous or liquid
- Inert gases, gaseous or liquid
- Jet fuel
- Kerosene
- Ketones
- Liquid petroleum gas
- Mineral oils
- Natural gas
- Nitrogen, gaseous or liquid
- Petroleum solvents
- Soap, liquid
- Steam
- Vegetable oils
- Water



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## Instructions

Fittings up to 1 1/2" (38mm) diameter

1. Use 1/2" (12mm) wide tape.
2. Clean the male and female threads thoroughly.
3. Wrap the tape around the male thread, making three complete wraps. Take care to keep the tape under tension as you are wrapping so the tape molds itself into the root of the thread. Make sure that you wrap with the thread (see Figure 1). Make sure that the tape does not overlap the end of the fitting. Three wraps seal most threads.

Fittings above 1 1/2" (38mm) diameter.

1. Use 3/4" (19mm) wide tape for fittings up to 2" (51mm) in diameter. Use 1" (25mm) wide tape for fittings larger than 2" (51mm) in diameter. Contact Restek for ordering information.
2. Follow steps 2-3 above.

## Note

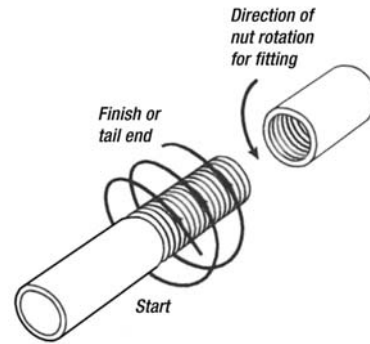
For poor quality or damaged threads or threads that are hard to seal, such as parallel threads or threads on fittings subject to vibration, more than three wraps may be necessary.

## Precautions

Keep ResTape™ Stainless Steel Thread-Seal Teflon® Tape clean. Replace the clip on the spool after use. Store in a clean place. ResTape™ Stainless Steel Thread-Seal Teflon® Tape is manufactured predominantly from PTFE resin. Teflon® PTFE is virtually chemically resistant to all media; however, there are a few exceptions. Alkali metals such as elemental sodium, potassium and lithium are to be avoided; these remove fluorine from the polymer molecule. Extremely potent oxidizers such as fluorine (F<sub>2</sub>), chlorine trifluoride (ClF<sub>3</sub>), and related compounds can be handled by Teflon® PTFE, but only with great care. Since fluorine is absorbed into the resin, the mixture becomes sensitive to a source of ignition, such as impact. Other media to avoid are 80% NaOH or KOH, metal hydrides such as boranes (e.g., B<sub>2</sub>H<sub>6</sub>), aluminum chloride, ammonia (NH<sub>3</sub>), certain amines (R-NH<sub>2</sub>), imines (R-NH), and 70% nitric acid at temperatures near the suggested service level. ResTape™ Stainless Steel Thread-Seal Teflon® Tape also contains nickel. Some acids might react with this metal on the surface of the tape. **Do not use ResTape™ Stainless Steel Thread Sealing Tape on oxygen lines!** We recommend ResTape™ Green Oxygen Tape for oxygen lines. For further safety details consult the Material Safety Data Sheet.

Restek trademarks: ResTape, the RPC logo. Other trademarks: Teflon (E.I. du Pont de Nemours & Co., Inc.)

Figure 1 Make sure that you wrap with the thread.



## Specifications

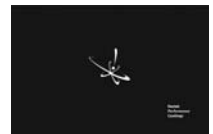
Composition	90.0% Teflon® PTFE /10% Nickel
Color	Silver
Length	260" (USA); 0.12m (international)
Width	1/2" (12mm)
Thickness	0.0045" +/- 10% (0.115mm +/- 10%)
Density, apparent	1.6g/cm <sup>3</sup> +/- 10%
Elongation	>50%
Temperature range	-450°F to +500°F (-268°C to +260°C) Teflon® PTFE is completely stable up to +500°F or +260°C. Decomposition is slow up to 750°F or +400°C. Although decomposition will occur on contact with naked flames.
Tensile Strength	10-12N/mm <sup>2</sup>

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## free literature

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