ResTape Stainless Steel Thread-Seal PTFE Tape
A nickel impregnated, PTFE thread-sealing tape designed for stainless steel fittings.
cat.# 22487

Description
ResTape Stainless Steel Thread-Seal Tape is a 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 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 PTFE 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

Restek offers treated fittings, tubing, sample cylinders, and more.
For information and ordering, call us or visit us online:
www.restek.com
Instructions
Fittings up to 1\(\frac{1}{2}\)" (38 mm) diameter
1. Use 3/4" (12 mm) 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 seals most threads.

Fittings above 1\(\frac{1}{2}\)" (38 mm) diameter.
1. Use 3/4" (19 mm) wide tape for fittings up to 2" (51 mm) in diameter. Use 1" (25 mm) wide tape for fittings larger than 2" (51 mm) 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 Tape clean. Replace the clip on the spool after use. Store in a clean place. ResTape Stainless Steel Thread-Seal Tape is manufactured predominantly from PTFE resin. 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\(_2\)), chlorine trifluoride (ClF\(_3\)), and related compounds can be handled by PTFE, but only with great care. Since fluorine is absorbed into the resin, the mixture becomes sensitive to a source of ignition, such as contact with naked flames. Do not use ResTape Stainless Steel Thread-Sealing Tape on oxygen lines! We recommends ResTape Green Oxygen Tape for oxygen lines. For further safety details consult the Material Safety Data Sheet.

Specifications
Composition 90.0% PTFE / 10% Nickel
Color Silver
Length 260’ (USA); 0.12 m (international)
Width 1/2" (12 mm)
Thickness 0.0045" +/- 10% (0.115 mm +/- 10%)
Density, apparent 1.6 g/cm\(^3\) +/- 10%
Elongation >50%
Temperature range -450 °F to +500 °F (-268 °C to +260 °C)
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 10-12 N/mm\(^2\)

Limited Liability
The information presented is in good faith, but no warranty is given nor are the results guaranteed. Since we have no control over the physical conditions surrounding the application of information herein contained, Restek disclaims any liability for untoward results.

Contact Technical Service at 1-800-356-1688, 1-814-353-1300, ext. 4, or support@restek.com (or contact your Restek representative) if you have any questions about this product or any other Restek product.