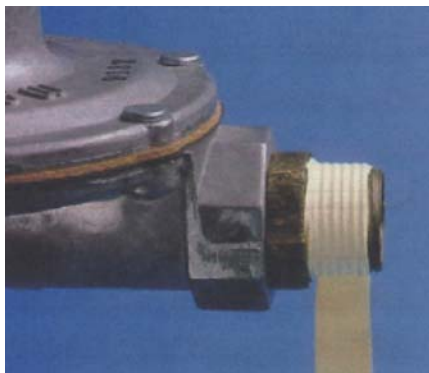


# ResTape™ Yellow Gas Thread-Seal Teflon® Tape

A color-coded, full density, PTFE thread-sealing tape designed for the gas industry.

cat.# 22486



## Description

ResTape™ Yellow Gas Thread-Seal Teflon Tape is a thick, full-density (maximum) density Teflon® PTFE thread-sealing tape designed specifically for gas lines. Unlike most thread-sealing tapes on the market, ResTape™ Yellow Gas Thread-Seal Teflon® Tape has not been stretched during the manufacturing process. Stretching lowers the apparent density of the tape by increasing its porosity. As stretched tape is more porous, more is required to obtain an effective seal. A stretched tape also is flimsy and difficult to work with, and is more likely to shred and string. The amount of tape wasted is high. With ResTape™ full density tape, these problems are avoided. ResTape™ Yellow Gas Thread-Seal Teflon® Tape is approved by relevant authorities and is used by the gas industry world-wide. It is color-coded yellow so fitters and inspectors can easily recognize it as an approved tape.

## Characteristics

- Compatible with a broad range of gases and liquids
- Compatible with a broad range of piping materials
- Will not harden or crack on the joint
- No curing time
- Effective across a broad range of temperatures
- Acts as a thread lubricant and anti-seize
- Prevents electrolytic corrosion of threads
- Clean
- Non-toxic
- Non-flammable
- Unlimited shelf life

## Applications

ResTape™ Yellow Gas Thread-Seal Teflon® Tape is manufactured from Teflon®. PTFE resin, a polymer consisting of recurring tetrafluoroethylene monomers whose formula is  $(\text{C}_2\text{F}_4 - \text{C}_2\text{F}_6)_n$ . One of the most inert substances known it is compatible with a very wide range of materials. ResTape™ Green Oxygen Tape can be used on pipe made from galvanized steel, iron, brass, copper, aluminum, stainless steel, polyethylene, polypropylene, PVC, CPVC, ABS or fiberglass. It can be used on pipes carrying the following materials:

- Acids, concentrated (see precautions) or dilute
- Air, compressed
- Alcohols
- Aliphatic solvents
- Ammonia, liquid
- Aromatic solvents
- Caustics, concentrated (see precautions) or dilute
- Chlorinated solvents
- Cutting oils
- Diesel fuel oil
- Ethylene glycol
- Fatty acids
- Gasohol
- Gasoline
- 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
- 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 seals 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

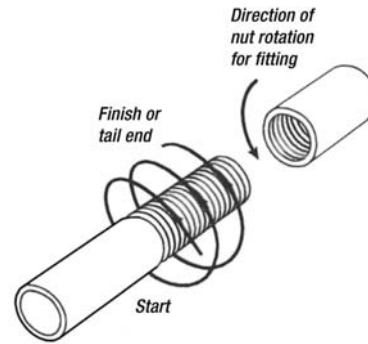
Keep ResTape™ Yellow Gas Thread-Seal Teflon® Tape clean. Replace the clip on the spool after use. Store in a clean place. PTFE is virtually chemically resistant to all media, however, there are a few exceptions. Alkali metals such as elemental sodium, potassium or lithium are to be avoided; they remove 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 PTFE, but only with great care. Fluorine is absorbed into the resin, and 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. **Do not use ResTape™ Yellow Gas Thread-Seal Teflon® Tape on oxygen lines!** We recommend Restek Green Oxygen Teflon® Tape for oxygen lines. For further safety details consult the Material Safety Data Sheet.

## Approvals

ResTape™ Yellow Gas Thread-Seal Teflon® Tape is approved by the following authorities: American Gas Association, Australian Gas Association, Canadian Gas Association, Underwriters' Laboratories, Underwriters' Laboratories of Canada. ResTape™ Yellow Gas Thread-Seal Teflon® Tape also is approved by Underwriters' Laboratories for use in sprinkler systems and water spray piping. Details of all approvals can be obtained on application to Restek.

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

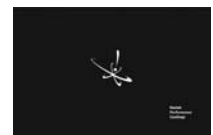
Composition	99.0% Teflon® PTFE < 1.0% pigment
Color	Yellow
Length	260" (USA); 0.12m (international)
Width	1/2" (12mm)
Thickness	0.004" +/- 10% (0.102mm +/- 10%)
Density, apparent	1.5g/cm <sup>3</sup> +/- 10%
Elongation	>100%
Pressure rating	In tests conducted by an independent laboratory ResTape™ Yellow Gas Thread-Seal Teflon® Tape was found to seal fittings carrying natural gas at pressures up to 4,347 PSI or 30,000kPa when applied as per instructions. (Details available upon application.) <b>Note:</b> Pressure ratings are relative to the quality and torque of the fittings and the amount of tape used.
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	12.5N/mm <sup>2</sup> average

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