

Unasco Green Oxygen Tape

A color-coded, oxygen compatible, full density, Teflon* thread sealing tape

Description

Unasco Green Oxygen Tape is a full or maximum density, Teflon thread sealing tape designed specifically for oxygen lines.

Teflon thread sealing tape is manufactured from Teflon PTFE resin mixed with a small amount of solvent. For normal applications it does not matter if the solvent is not removed from the finished product.

However, when operating in a pure oxygen environment remaining volatiles can react with the oxygen and cause an explosion. So Unasco Green Oxygen Tape put through a rigorous process to remove the solvent.

Furthermore, Unasco Green

Oxygen Tape is a thick, full-density threadsealing tape. Thus, the fitter can be assured that he or she will get an effective seal. Also, as an important safety feature, Unasco Green Oxygen Tape is pigmented green to ensure that the fitter or inspector can easily recognize that the tape he or she is using is compatible with oxygen.

Further Characteristics

- Compatible with gaseous or liquid oxygen
- 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
- Indefinite shelf life
- Exceeds MIL-T-27730A

Applications

Unasco Green Oxygen Tape is manufactured from Teflon. Teflon PTFE resin is a polymer consisting of recurring tetrafluoroethylene



monomers whose formula is $(C_2F_4 - C_2F_3)_n$. It is one of the most inert substances known. Therefore, it is compatible with a very wide range of materials.

It can be used on pipe made from galvanized steel, iron, brass, copper, aluminium, stainless steel, polyethylene, polypropylene, PVC, CPVC, ABS and fibreglass.

It can also be used on pipes carrying the following materials:

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

For a more detailed list of chemicals compatible with Unasco Green Oxygen Tape, contact Unasco.

Specifications

Composition	99.6% Teflon PTFE / <0.4% pigment
Colour	Green
Length	260" USA only/12m International
Width	1/2"/12mm, 3/4"/19mm and 1"/25mm
Thickness	0.102mm±10%
Density, apparent	1.5g/cm ³ ±10%
Elongation	>100%
Tensile strength	12.5N/mm ² average
Pressure rating	Unasco Green Oxygen Tape has been used regularly on oxygen fittings at pressures up to 2,173.9PSI or 15,000kPa Note. Pressure ratings are relative to the quality and torquing of the fittings and the amount of tape used.
Temperature range	-450 to +500° F / -268 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 flame.

Packaging

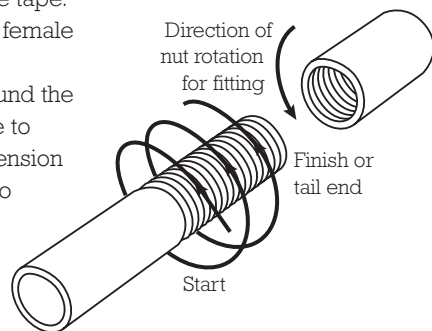
Size	By Shrink Pack		By Carton	
	Qty	oz/gms	Qty	lbs/kgs
1/2"/12mm	10	9.5/269	250	17.0/7.7
3/4"/19mm	6	9.3/265	150	16.5/7.5
1"/25mm	6	10.2/288	150	17.6/8.0

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. Take care to keep the tape under tension as you are wrapping so the tape moulds itself into the root of the thread.
4. Make sure that you wrap with the thread.

5. Make sure that the tape does not overlap the end of the fitting.



6. 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.
2. Follow the directions given above.

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

Precautions

Note. Keep Unasco Green Oxygen Tape clean! Do not store Unasco Green Oxygen Tape where it is likely to become contaminated by mineral, vegetable or animal oils and greases or any other chemical likely to react violently with oxygen.

Replace the clip on the spool after use and store in a clean place. Wash all possible contaminating substances from your hands prior to use. If contamination in the work place is a problem we recommend Unasco Green Oxygen Tape in the sealed clipper/dispenser.

Contact Unasco for further information. Teflon PTFE is virtually chemically resistant to all medias, however there are a few exceptions. Alkali metals such as elemental sodium, potassium and lithium are to be avoided. These alkali metals remove fluorine from the polymer molecule.

Extremely potent oxidizers such as fluorine (F₂) and related compounds (e.g., Chlorine trifluoride, (ClF₃), can be handled by Teflon, 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 medias to avoid are 80% NaOH or KOH, metal hydrides such as boranes (e.g., B₂H₆), aluminium chloride, ammonia (NH₃), certain amines (R-NH₂), imines (R-NH) and 70% nitric acid at temperature near the suggested service level. For further safety information, consult the Material Safety Data Sheet.

Approvals

Unasco Green Oxygen Tape has been approved for world wide use by the British Oxygen Company (B.O.C.). Green Oxygen Tape has also been tested approved by Bundesanstalt Für Materialforschung und-Prüfung (Germany).

Limited Liability

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*Teflon is a registered trademark of Dupont



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