

# Glass Indicating Oxygen Trap

cat.# 22010, 22011

## WARNING

- Do not pass air or oxidizing gases in concentrations above 0.1% through this filter! The rapid oxidation of the active adsorbent in this filter can cause the filter bed to become extremely hot, resulting in danger of fire or burn injuries. Limited exposure of the filter to air during installation does not result in rapid reaction or dangerous heat generation.
- Maximum pressure 6.9 bar/680 kPa (100 psig). Wear eye protection and use caution when working with pressurized systems.
- Do not expose the protective outer plastic tube to solvents.
- Do not use without the protective outer plastic tube in place.
- Special precautions might be required when using hydrogen or other hazardous gases. Consult local regulations and your company's safety procedures.



## Product Information

This compact Restek® Glass Indicating Oxygen Trap is designed to remove oxygen from chromatography carrier gas streams and is intended for use with nonoxidizing gases such as He, Ar, N<sub>2</sub>, H<sub>2</sub>, or CH<sub>4</sub>, with a maximum recommended flow rate of 10 L/min. It has a light-green inner section that changes color to gray when its adsorption capacity is depleted. The filter consists of a heavily-walled inner glass tube filled with copper-based adsorbent and a green indicator. The glass tube is shielded by an outer clear plastic tube for increased safety should the glass break. The adsorbents form copper oxide in the presence of oxygen; no gas is generated. Maximum pressure is 6.9 bar (100 psig). Approximate dimensions are 3.5 cm x 26 cm including fittings; fittings are either 1/4" or 1/8" compression fittings.

## Installation

The Restek® Glass Indicating Oxygen Trap is delivered in its active state; it is filled with helium and is ready for use, but it is recommended that the trap be purged with the gas you will be using. To connect in-line, first purge the gas line to remove air or oxygen. While maintaining a low purge rate of 10 to 30 cc/min, quickly remove the end plugs from both ends of the oxygen trap, and then attach the trap to the gas line. When connecting to a gas line, use two wrenches at each coupling. Tightening the fittings by holding the trap while torquing the nut, or using wrenches on opposite ends of the trap, can break the glass. Next, attach the outlet end of the trap to the instrument, and then continue purging the entire system until a total of 1 to 2 liters of gas has been flushed through.

**Warning:** If you are using hydrogen or another hazardous gas, additional special procedures may be called for. Consult your company's safety procedures.

**Note:** While the end plugs are removed from the trap during installation, the active adsorbent will react with air at a rate limited by diffusion into the adsorbent, and the trap may warm slightly. As long as the trap is attached to the gas line within a few minutes, trap heating and the loss of oxygen-adsorbing capacity will be negligible.

## Reorder Information

Description	Fittings	qty.	cat.#
Indicating Oxygen Trap	1/8" Brass	ea.	22010
Indicating Oxygen Trap	1/4" Brass	ea.	22011

## Oxygen Indicator



Before Color Change

After Color Change

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