



Dimensions: 9¹/₄" x 2" (23.5 x 5.1 cm)



22081

High-Capacity Indicating Oxygen Trap

- Indicator changes from dark blue to black as oxygen & water are trapped.
- Lasts longer than three smaller traps.
- Use with all carrier gases.
- Ambient operating temperature, 100psi (689kPa) operating pressure.
- Built-in frit traps microparticles.
- Outlet gas purity:
 - $O_2 < 0.1\text{ppm}$ when inlet does not exceed 15ppm.
 - $H_2O < 0.5\text{ppm}$ when inlet does not exceed 10ppm.
- Maximum operating pressure: 150psi (1,034kPa).
- Maximum flow: 16.5L/min.

Description	qty.	cat.#	price
High-Capacity Indicating Oxygen Trap, 1/8" Compression Tube Brass Fittings	ea.	20624	
High-Capacity Indicating Oxygen Trap, 1/4" Compression Tube Brass Fittings	ea.	20623	
Replacement Cartridge (fits 1/4" or 1/8" housing) Replacement O-Rings (5 small O-rings and 5 large O-rings)	ea. kit	20625 22081	



Dimensions: 10" x 1¹/₄" (25.4 x 3.2 cm)

Indicating Oxygen Trap

- Indicator changes from light green to grey as oxygen is trapped.
- Heavy-walled glass body prevents oxygen & water infusion.
- Prepurged for fast stabilization.
- 100psi (689kPa) maximum operating pressure.
- Reduces oxygen to 0.1ppm.

Description	qty.	cat.#	price
Indicating Oxygen Trap, 1/8" Nickel-Plated Brass Fittings	ea.	22010	
Indicating Oxygen Trap, 1/4" Nickel-Plated Brass Fittings	ea.	22011	



Dimensions: 11" x 1¹/₂" (27.9 x 3.8 cm)

High-Capacity Oxygen Trap

- Removes up to 600mg of oxygen or 2g of water.
- Long life—typically purifies more than five 200ft³ cylinders.
- Reduces oxygen to 15ppb.
- Maximum operating pressure: 250psi (1,724kPa).
- Flow: 3L/min. @ 32psi (221kPa).

Description	qty.	cat.#	price
High-Capacity Oxygen Trap, 1/2" Nickel-Plated Brass Fittings	ea.	20601	
High-Capacity Oxygen Trap, 1/4" Nickel-Plated Brass Fittings	ea.	20600	

Rechargeable Molecular Sieve S-Trap

- Traps water vapor; increases column and oxygen trap lifetime.
- Reduces baseline noise from sensitive detectors such as ECDs and mass spectrometers.
- Activated and ready to use.
- Reduces water to less than 1ppm.
- Fits in GC oven for easy thermal recharging.
- Maximum flow: 1L/min.



Dimensions: 6³/₄" x 5⁵/₈"
(17.1 x 14.3 cm)

Description	qty.	cat.#	price
Rechargeable Molecular Sieve S-Trap, 1/8" Brass Fittings	ea.	20686	
Rechargeable Molecular Sieve S-Trap, 1/4" Brass Fittings	ea.	20685	



Dimensions: 11" x 1¹/₂" (27.9 x 3.8 cm)

High-Capacity Moisture Trap

- Purged with ultra-high-purity helium; ready to use.
- Reduces water to less than 15ppb.
- Maximum operating pressure: 250psi (1,724kPa).
- Maximum flow: 1.25L/min.

Description	qty.	cat.#	price
High-Capacity Moisture Trap, 1/8" Nickel-Plated Brass Fittings	ea.	21997	
High-Capacity Moisture Trap, 1/4" Nickel-Plated Brass Fittings	ea.	20638	



Dimensions: 13" x 2" (33 x 5.1 cm)

Indicating Moisture Trap

- Reduces water to less than 10ppb; indicator changes from blue to pink at 5% relative humidity.
- Prepurged for fast stabilization.
- Reduces noise from high-sensitivity detectors.
- Heavy-walled glass body prevents oxygen & water infusion.
- 40µm frit prevents microparticulate damage to needle valves and flow controllers.
- Maximum operating pressure: 100psi (689kPa).

Description	qty.	cat.#	price
Indicating Moisture Trap, 1/2" Nickel-Plated Brass Fittings	ea.	22014	
Indicating Moisture Trap, 1/4" Nickel-Plated Brass Fittings	ea.	22015	

Restek Super-Clean Gas Filters

- High-purity output ensures 99.9999% pure gas (at max. flow of 2L/min.).
- “Quick connect” fittings for easy, leak-tight cartridge changes.
- Glass inside to prevent diffusion; polycarbonate housing outside for safety.
- All traps measure 10⁵/₈" x 1³/₄" (27 x 4.4 cm).
- Each base plate unit measures 4" x 4" x 1⁷/₈" (10.2 x 10.2 x 4.8 cm).



Table I Each Super-Clean gas filter provides high-purity outlet gas.

Type of Filter	Outlet Gas Quality (%)	Maximum Pressure/ Maximum Flow Rates	Use for:	Indicator Color Change	Capacity			Estimated Lifetime (years)
					H ₂ O (g)	O ₂ (mL)	Hydrocarbons (g)	
Moisture cat.# 22028	>99.9999	11 bar 159psi/ 7 L/min.	Inert carrier gas Air Hydrogen	Yellow/orange to clear	7.2	—	—	>2
Oxygen cat.# 22029	>99.9999	11 bar 159psi/ 7 L/min.	Inert carrier gas	Green to grey	NA	1,000	—	>2
Hydrocarbons cat.# 22030	>99.9999	11 bar 159psi/ 7L/min.	Inert carrier gas Air Hydrogen	No indicator	NA	—	12 ¹	>2
Fuel Gas ¹ cat.# 22022	>99.9999	11 bar 159psi/ 7L/min.	Inert carrier gas Air Hydrogen	Yellow/orange to clear	3.5	—	24 ³	>1.5
Triple ² cat.# 22020	>99.9999	11 bar 159psi/ 7L/min.	Inert carrier gas	Yellow/orange to clear Green to grey	1.8	500	4 ³	>1
Helium Specific ² cat.# 21982	>99.9999	11 bar 159psi/ 7L/min.	Helium	Yellow/orange to clear Green to grey	1.8	500	—	>1

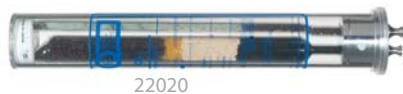
¹Removes hydrocarbons, moisture.

²Removes hydrocarbons, moisture, oxygen.

³As *n*-butane.

did you know?

All Restek Super-Clean gas filter cartridges (except hydrocarbon filter cat.# 22030) feature easy-to-read indicators. The indicator code is shown on every trap so there is no confusion about when to replace it.



Restek Super-Clean Gas Filter Kits and Replacements

Description	qty.	cat.#	price
Carrier Gas Cleaning Kit (includes mounting base plate, 1/8" inlet/outlet fittings, and oxygen/moisture/hydrocarbon Triple Gas Filter)	kit	22019	
Fuel Gas Purification Kit (includes mounting base plate, 1/8" inlet/outlet fittings, and hydrocarbon/moisture Fuel Gas Filter)	kit	22021	enquire
Ultra-High Capacity Hydrocarbon Filter	ea.	22030	
Ultra-High Capacity Moisture Filter	ea.	22028	
Ultra-High Capacity Oxygen Filter	ea.	22029	
Replacement Triple Gas Filter (removes oxygen, moisture and hydrocarbons)	ea.	22020	
Replacement Fuel Gas Filter (removes moisture and hydrocarbons)	ea.	22022	
Helium-Specific Carrier Gas Cleaning Kit (includes mounting base plate, 1/8" inlet/outlet fittings, and oxygen/moisture/hydrocarbon Helium-Specific Filter)	kit	21983	
Replacement Helium-Specific Gas Filter (removes oxygen, moisture and hydrocarbons)	ea.	21982	
Gas Filter Bundle Kit (includes one Triple Gas Filter, cat.#22020 and two Fuel Gas Filters, cat.# 22022)	kit	22031	



tech tip

Oxygen and Moisture Traps

Restek highly recommends oxygen and moisture traps for make-up gas when operating sensitive detectors such as electron capture detectors (ECD). The hydrogen reaction gas for sensitive electrolytic conductivity detectors (ELCD) also requires a hydrocarbon trap, to remove trace impurities.

Super-Clean Gas Filters



Restek Filter Base Plates

- Standard base plate fittings are 1/8". To adapt to 1/4", order 1/8" to 1/4" tube-end unions.
- Base plates fit all Super-Clean gas filters listed on previous page.

Description	qty.	Brass		Stainless Steel		
		cat.#	price	qty.	cat.#	price
Single-Position Filter Base Plate	ea.	22025		ea.	22344	
2-Position Filter Base Plate	ea.	22026		ea.	22345	
3-Position Filter Base Plate	ea.	22027		ea.	22346	

Wall Mounting Bracket

- Base plates can be mounted by using screws and the mounting holes on the base plate, or by using this optional wall mounting bracket.



Description	qty.	cat.#	price
Wall Mounting Bracket for Super-Clean Base Plates	ea.	21984	

Replacement O-Rings for Cartridge Base Plates

- Pack includes 10 large O-rings and 10 small O-rings.



Description	qty.	cat.#	price
Replacement O-Rings for Cartridge Base Plates	20-pk.	22023	

1/8-Inch to 1/4-Inch Tube-End Unions

- To adapt 1/8" Super-Clean base plate fittings to 1/4", use 1/8" to 1/4" tube-end unions.



Description	qty.	Brass		Stainless Steel		
		cat.#	price	qty.	cat.#	price
1/8" to 1/4" Tube-End Unions	5-pk.	21833		2-pk.	21933	

Restek Super-Clean Gas Trapping System for LC/MS

A Super-Clean quick-change cartridge system efficiently removes hydrocarbons from nitrogen!

- Changing filters is quick and easy.
- Up to 20L of hydrocarbon-free nitrogen per minute.
- Filters connected in parallel to handle high flows of LC/MS.



20L of purified nitrogen per minute!

Super-Clean Gas Filters provide high-purity outlet gas

Type of filter:	Hydrocarbon (charcoal)
Max. Flow:	20L/min.
Outlet Gas Quality %:	99.9999%
Maximum Pressure:	11 bar/159psi
Estimated Lifetime:	3 to 6 months

Super-Clean Gas Trapping System for LC/MS

Description	qty.	cat.#	price
Super-Clean Gas-Trapping System (2-position base plate, 2 charcoal filters)	ea.	22062	
Replacement Hydrocarbon (Charcoal) Filters	2-pk.	22061	

also available

Looking for a nitrogen generator for your LC/MS? Restek offers a full line of Parker LC/MS generators. See page 233.



Catch the Buzz

Sign up for Restek's e-newsletter, *The Buzz*
www.restek.com/buzz