

# Ultra Clean Gas Filters

*Simply the best*

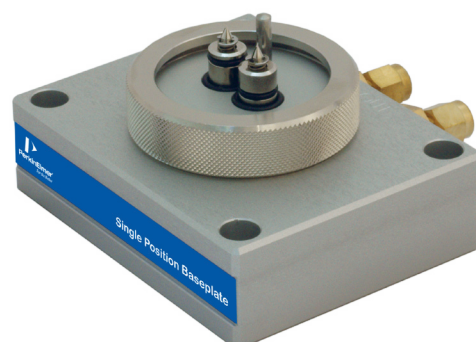
## Cartridge Type



## Features

- Ultra-high capacity
- High-purity output ensures 99.9999% Pure gas
- “Quick connect” fittings for easy, leak-tight cartridge changes
- Glass inside to prevent diffusion; plastic outside for safety
- Easy-to-read indicators

  
**PerkinElmer**<sup>®</sup>  
*For the Better*



# Ultra Clean Gas Filters

Cartridge systems make changing gas filters quick and easy. A base plate allows cartridges to be exchanged without introducing oxygen.

Spring-loaded check valves seal when a filter is removed and open only when a new filter has been locked in place. There is no longer a need for loosening and tightening fittings every time a trap is changed and your system will not become contaminated during the process



# Carrier Gas Purity

Carrier gas should contain less than 1ppm of oxygen, moisture, or other trace contaminants, to prevent column degradation, increase column lifetime, and decrease stationary phase bleed.

The expense of using high-purity gases in combination with carrier gas line purifiers will be offset by longer column lifetime and less GC maintenance.

Contaminants cause ghost peaks to appear during temperature programming and degrade the validity of analytical data.

Make-up gas also should be contaminant-free, or baseline fluctuations and excessive detector noise can occur; detector gases should be free of water and hydrocarbons, or excessive baseline noise can result.

Gas purifiers remove these contaminants from gas sources, thereby improving system performance.



# Ultra Clean Gas Filter Kits for GC



## Triple Filter Kit for MS/ECD/NPD

The Triple Filter Kit is an all in one solution ideal for purifying carrier gas. The kit includes 1 Triple (Oxygen/Moisture/Hydrocarbon) Filter cartridge and (1) 1 position base plate.

Filter Type	Part No.	Gas Type
Triple Filter	N9306819	Carrier Gas

Kit Part No. **N9306829**

## Complete Filter Bundle Kit for FID

The Fuel Gas Triple Kit is perfect for purifying carrier gas and flame ionization detector (FID) fuel gases, removing oxygen, moisture and hydrocarbons from the carrier gas using the **triple filter** and removing both moisture and hydrocarbons from the Fuel gas using the two **combi filters**. Using the combi filters for FID Hydrogen and air will produce a stable baseline, improving overall reproducibility and sensitivity.

Filter Type	Part No.	Gas Type
Triple Filter	N9306819	Carrier Gas
Combi Filter	N9306818	Hydrogen
Combi Filter	N9306818	Air

Kit Part No. **N9306843**



# Ultra Clean Gas Filters for GC

## Ultra-High Capacity Moisture Filter

Catalog No. N9306814

### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H <sub>2</sub> , N <sub>2</sub> , AR, Air
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years

## Moisture Removal

Moisture in carrier gas lines will prematurely degrade oxygen and hydrocarbon traps and increase detector noise. As a precaution, we highly recommend installing a moisture trap before the hydrocarbon and oxygen traps on all carrier gas lines.

### Capacity

H <sub>2</sub> O	7.2 g
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### Ultra-High Capacity Oxygen Filter

Catalog No. N9306815

#### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H <sub>2</sub> , N <sub>2</sub> , AR
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



### Oxygen Removal

Oxygen is a column killer. It is present even in UHP gases, as minutes leaks at fittings allow oxygen to influx against the concentration gradient. Because oxygen can enter a gas line at any fitting or during gas bottle exchange, the oxygen trap should be the last connection before the gas line enters the chromatograph.

#### Capacity

O <sub>2</sub>	1000 mL
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### Ultra-High Capacity Hydrocarbon Filter

Catalog No. N9306816

#### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H <sub>2</sub> , N <sub>2</sub> , AR, Air
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



### Hydrocarbon Removal

Use a hydrocarbon trap if your gas has a potential source of hydrocarbon contaminants or if you suspect you are observing carrier gas ghost peaks. Install the hydrocarbon trap after the moisture trap, to prevent moisture from degrading the hydrocarbon-trapping ability of the activated carbon in the hydrocarbon trap.

#### Capacity

HC	24 g (as <i>n</i> -butane)
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### Ultra-High Capacity Indicating Hydrocarbon Filter

Catalog No. N9306817

#### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H <sub>2</sub> , N <sub>2</sub> , AR, Air
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



### Indicating Hydrocarbon

The hydrocarbon trap is also available with AT indicator.

#### Capacity

HC	24 g (as <i>n</i> -butane)
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### High Capacity Combi Filter

Catalog No. N9306818

#### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H <sub>2</sub> , N <sub>2</sub> , AR, Air
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



### Fuel Gas Filter

The Fuel Gas Filter is perfect for purifying flame ionization detector (FID) fuel gases, removing both **moisture** and **hydrocarbons**. Using the Fuel Gas Filter for FID Hydrogen and air will produce a stable baseline, improving overall reproducibility and sensitivity. Ideal for use in combination with a zero air generator.

#### Capacity

H <sub>2</sub> O	3.5 g
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HC	12 g (as <i>n</i> -butane)
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### High Capacity Triple Filter

Catalog No. N9306819

#### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H <sub>2</sub> , N <sub>2</sub> , AR
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



### Triple Filter

The Triple trap is ideal for purifying carrier gas. It contains oxygen, moisture and hydrocarbon scrubbers in one easy to change economical cartridge

#### Capacity

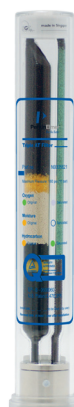
H <sub>2</sub> O	1.8 g
O <sub>2</sub>	500 mL
HC	7 g (as <i>n</i> -butane)

### High Capacity Triple Filter with AT Indicator

Catalog No. N9306821

#### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	Inert carrier gas, He, H <sub>2</sub> , N <sub>2</sub> , AR
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



### Triple Filter with AT Indicator

The Triple trap is also available with AT indicator for Hydrocarbon.

#### Capacity

H <sub>2</sub> O	1.8 g
O <sub>2</sub>	500 mL
HC	7 g (as <i>n</i> -butane)

### High Capacity Triple Filter Helium Specific

Catalog No. N9306820

#### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	He
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



### Triple Filter Helium Specific

The Helium-Specific Triple trap is ideal for purifying helium in GC/MS systems. This trap is packed and purged under helium and contains oxygen, moisture and hydrocarbon scrubbers in one cartridge.

#### Capacity

H <sub>2</sub> O	1.8 g
O <sub>2</sub>	500 mL
HC	7 g (as <i>n</i> -butane)

### High Capacity Triple Filter Hydrogen Specific

Catalog No. N9306822

#### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	7 L/min.
Usable For	H <sub>2</sub>
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	> 2 years



### Triple Filter Hydrogen Specific

The Hydrogen-Specific Triple trap is ideal for purifying hydrogen in GC/MS systems. This trap is packed and purged under hydrogen and contains oxygen, moisture and hydrocarbon scrubbers in one cartridge.

#### Capacity

H <sub>2</sub> O	1.8 g
O <sub>2</sub>	500 mL
HC	7 g (as <i>n</i> -butane)

# Ultra Clean Gas Filters for LC/MS



Kit Part No. N9306840

To meet the high flow needs of the LC/MS system, the hydrocarbon or moisture filled cartridges are positioned and placed in parallel. The incoming gas stream is split equally between the cartridges and the two streams are rejoined after purification but before the gas exits the base plate.

## Ultra-High Capacity Hydrocarbon Filter bundle for LC/MS

Catalog No. N9306823

### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	20 L/min.
Usable For	Nitrogen
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	3 to 6 months

## Ultra-High Capacity Indicating Hydrocarbon Filter bundle for LC/MS

Catalog No. N9306825

### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	20 L/min.
Usable For	Nitrogen
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	3 to 6 months

## Ultra-High Capacity Moisture Filter bundle for LC/MS

Catalog No. N9306824

### Specifications

Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	20 L/min.
Usable For	Inert carrier gas, He, H <sub>2</sub> , N <sub>2</sub> , AR, Air
Dimensions	24 cm x Ø 4.4 cm
Weight	0.26 Kg
Estimated Lifetime	3 to 6 months



### Hydrocarbon Removal

Up to 20 L/min. of hydrocarbon-free nitrogen per minute.

#### Capacity

HC 24 g (as *n*-butane)



### Indicating Hydrocarbon

The high flow hydrocarbon trap is also available with AT indicator.

#### Capacity

HC 24 g (as *n*-butane)



### Moisture Removal

High Flow moisture filters are ideal for central purifying solutions. Moisture in carrier gas lines will prematurely degrade oxygen and hydrocarbon traps and increase detector noise. As a precaution, we highly recommend installing a moisture trap before the hydrocarbon and oxygen traps on all carrier gas lines.

#### Capacity

H<sub>2</sub>O 7.2 g

# Ordering Information

## Ultra Clean Filter and Base plate Kits



Part No. *	Description	qty.
N9306829	Ultra Clean 1 Triple Filter Kit - 1/8" Brass Includes (1) 1 position base plate with 1/8" Brass inlet/outlet fittings and (1) Oxygen/Moisture/Hydrocarbon Trap	kit
N9306833	Ultra Clean 1 Triple Helium Specific Filter Kit - 1/8" Brass Includes (1) 1 position base plate with 1/8" Brass inlet/outlet fittings and (1) Oxygen/Moisture/Hydrocarbon Helium Specific Trap	kit
N9306837	Ultra Clean 1 Triple Hydrogen Specific Filter Kit - 1/8" Brass Includes (1) 1 position base plate with 1/8" Brass inlet/outlet fittings and (1) Oxygen/Moisture/Hydrocarbon Hydrogen Specific Trap	kit
N9306843	Ultra Clean 3 Filters Kit - 1/8" Brass Includes (1) 3 position base plate with 1/8" Brass inlet/outlet fittings and (1) Oxygen/Moisture/Hydrocarbon Trap and (2) Hydrocarbon/Moisture Traps	kit

\* For ordering base plates or Ultra Clean Gas filter kits with a different connector type please check [www.perkinelmer.com/gcsupplies](http://www.perkinelmer.com/gcsupplies) for the correct part number.



## Ultra Clean Replacement Filter Bundles

Part No.	Description	qty.
N9306826	Ultra Clean Filter Bundle of 3 Includes (1) Oxygen/Moisture/Hydrocarbon Trap and (2) Hydrocarbon/Moisture Traps	bundle
N9306827	Ultra Clean Filter Bundle of 4 Includes (1) Moisture Trap, (1) Oxygen Trap, and (2) Hydrocarbon Traps	bundle

## Ultra Clean Replacement Filters



Part No.	Description	qty.
N9306814	Ultra Clean Moisture Filter	ea.
N9306815	Ultra Clean Oxygen Filter	ea.
N9306816	Ultra Clean Hydrocarbon Filter	ea.
N9306817	Ultra Clean Hydrocarbon AT Filter	ea.
N9306818	Ultra Clean Combi (Hydrocarbon/Moisture) Filter	ea.
N9306819	Ultra Clean Triple (Oxygen/Moisture/Hydrocarbon) Filter	ea.
N9306821	Ultra Clean Triple (Oxygen/Moisture/Hydrocarbon) with AT indicator Filter	ea.
N9306820	Ultra Clean Triple (Oxygen/Moisture/Hydrocarbon) Helium-specific Filter	ea.
N9306822	Ultra Clean Triple (Oxygen/Moisture/Hydrocarbon) Hydrogen-specific Filter	ea.

## Ultra Clean Filter Base plates



Part No. *	Description	qty.
N9306801	Ultra Clean Base plate 1 Position - 1/8" Brass	ea.
N9306805	Ultra Clean Base plate 2 Position - 1/8" Brass	ea.
N9306811	Ultra Clean Base plate 3 Position - 1/8" Brass	ea.

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# Ordering Information

## Ultra Clean Base plate Flush Cap Replacement Set for GC/MS



Part No.	Description	qty.
N9306852	Ultra Clean Flush Cap Replacement Set	2-pk.

## Wall mounting Bracket for all Cartridge base plates



Part No.	Description	qty.
N9306855	Ultra Clean Wall-mounting Bracket Set	ea.

## Replacement O-Rings for all Cartridge base plates



Part No.	Description	qty.
N9306854	Ultra Clean Base plate O-ring Replacement Set	20-pk.

## Super Clean™ Base plate fittings for GC/MS



Part No.	Description	qty.
N9306846	Ultra Clean Connector Set - 1/4" Brass	6-pk
N9306847	Ultra Clean Connector Set - 1/8" Brass	6-pk
N9306848	Ultra Clean Connector Set - 1/4" Stainless steel	6-pk.
N9306849	Ultra Clean Connector Set - 1/8" Stainless steel	6-pk.

## Ultra Clean Filter and Base plate Kits for LC/MS



Part No. *	Description	qty.
N9306840	Ultra Clean High Flow Hydrocarbon Filter Kit - 1/4" Brass Includes (1) 2 position high flow base plate with 1/4" Brass inlet/outlet fittings, (2) High Flow Hydrocarbon Traps, and a 1/4" Brass Particle Filter	kit

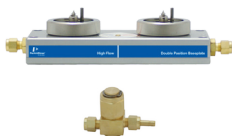
\* For ordering base plates or Ultra Clean Gas filter kits with a different connector type please check [www.perkinelmer.com/gcsupplies](http://www.perkinelmer.com/gcsupplies) for the correct part number.

## Ultra Clean Replacement Filter Bundles for LC/MS



Part No.	Description	qty.
N9306823	Ultra Clean High Flow Hydrocarbon Filter Bundle Includes (2) High Flow Hydrocarbon Traps	bundle
N9306825	Ultra Clean High Flow Hydrocarbon AT Filter Bundle Includes (2) High Flow Indicating Hydrocarbon Traps	bundle
N9306824	Ultra Clean High Flow Moisture Filter Bundle Includes (2) High Flow Moisture Traps	bundle

## Ultra Clean Base plate for LC/MS



Part No. *	Description	qty.
N9306808	Ultra Clean High Flow Base plate 2 Position - 1/4" Brass Includes 1/4" Brass Particle Filter	ea.

\* For ordering base plates or Ultra Clean Gas filter kits with a different connector type please check [www.perkinelmer.com/gcsupplies](http://www.perkinelmer.com/gcsupplies) for the correct part number.



# Ordering Information



## Particle Filter for LC/MS

Part No.	Description	qty.
N9306856	Ultra Clean 0.5 Micron Particle Filter (1/4" Brass)	ea.
N9306857	Ultra Clean 0.5 Micron Particle Filter Cup Replacement Pack	12-pk.



## Ultra Clean Base plate fittings for LC/MS

Part No.	Description	qty.
N9306850	Ultra Clean High Flow Connector Set - 1/4" Brass	6-pk.
N9306851	Ultra Clean High Flow Connector Set - 1/4" Stainless steel	6-pk.



## Ultra Clean Base plate Flush Cap Replacement Set for LC/MS

Part No.	Description	qty.
N9306853	Ultra Clean High Flow Flush Cap Replacement Set	2-pk.



**Perkin Elmer, Inc**

710 Bridgeport Avenue

Shelton, CT 06484

Phone: 800-762-4000 or 203-925-4602

Fax: 203-944-4905

Email: [las.supplies@perkinelmer.com](mailto:las.supplies@perkinelmer.com)

[www.perkinelmer.com/gcsupplies](http://www.perkinelmer.com/gcsupplies)