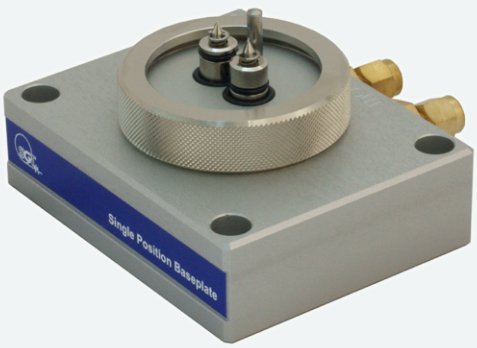
# Super Clean™ Gas Filters

*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

rev. 1.3

EP-B-0606960 U.S. Patent 5.478.378

# Super 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 filters everytime a trap is changed and your system will not become contaminated during the proces



# 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.

# Applications & Configurations



### 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 | SGT-F0301 | Carrier Gas |

Kit Part No. **SGT-B1010-B8**

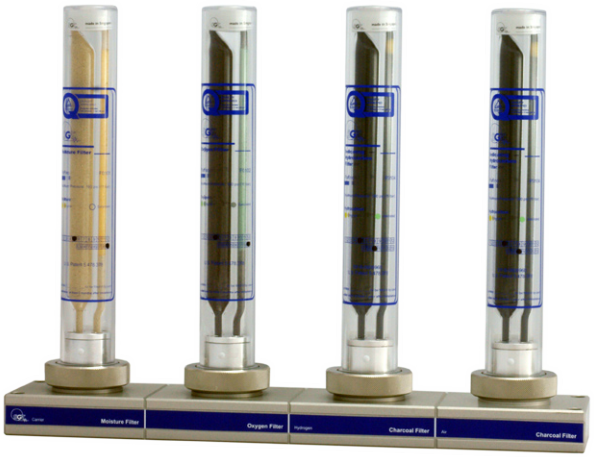
### Complete Filter Bundle Kit for FID

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 reproducability and sensitivity.

| Filter Type | Part No. | Gas Type |
|---|---|---|
| Triple Filter | SGT-F0301 | Carrier Gas |
| Combi Filter | SGT-F0201 | Hydrogen |
| Combi Filter | SGT-F0201 | Air |

Kit Part No. **SGT-B1030-B8**





### Ultra Capacity Filter Bundle Kit for FID

Ultra **purity** combined with Ultra **capacity**. This kit contains (1) Ultra High Capacity Moisture filter, (1) Ultra High Capacity Oxygen Filter, (2) Ultra High Capacity Hydrocarbon Filters and (1) four position base plate.

| Filter Type | Part No. | Gas Type |
|---|---|---|
| Moisture Filter | SGT-F0101 | Carrier Gas |
| Oxygen Filter | SGT-F0102 | Carrier Gas |
| Hydrocarbon Filter | SGT-F0103 | Hydrogen |
| Hydrocarbon Filter | SGT-F0103 | Air |

Kit Part No. **SGT-B1040-B8**

### Fuel Gas Kit for FID

The Fuel Gas Kit Gas 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 reproducability and sensitivity.

| Filter Type | Part No. | Gas Type |
|---|---|---|
| Combi Filter | SGT-F0201 | Hydrogen |
| Combi Filter | SGT-F0201 | Air |

Kit Part No. **SGT-B1020-B8**



# Super Clean™ Gas Filters for GC/MS

**Ultra-High Capacity Moisture Filter**

**Catalog No.** SGT-F0101

| Specifications | |
|---|---|
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 7 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, 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 higly recommend installing a moisture trap before the hydrocarbon and oxygen traps on all carrier gas lines.

| Capacity | |
|---|---|
| **$H_2O$** | 7.2 g |

### Ultra-High Capacity Oxygen Filter

**Catalog No.** SGT-F0102

**Specifications**

| | |
|---|---|
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 7 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, 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** | |
|---|---|
| **$O_2$** | 1000 mL |

### Ultra-High Capacity Hydrocarbon Filter

**Catalog No.** SGT-F0103

**Specifications**

| | |
|---|---|
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 7 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, 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 *n*-butane) |

### Ultra-High Capacity Indicating Hydrocarbon Filter

**Catalog No.** SGT-F0104

**Specifications**

| | |
|---|---|
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 7 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, 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 *n*-butane) |

### High Capacity Combi Filter

**Catalog No.** SGT-F0201

**Specifications**

| | |
|---|---|
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 7 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, 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** | |
|---|---|
| **$H_2O$** | 3.5 g |
| **HC** | 12 g (as *n*-butane) |

### High Capacity Triple Filter

**Catalog No.** SGT-F0301

**Specifications**

| | |
|---|---|
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 7 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, 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** | |
|---|---|
| **$H_2O$** | 1.8 g |
| **$O_2$** | 500 mL |
| **HC** | 7 g (as *n*-butane) |

### High Capacity Triple Filter with AT Indicator

**Catalog No.** SGT-F0303

**Specifications**

| | |
|---|---|
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 7 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, 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** | |
|---|---|
| **$H_2O$** | 1.8 g |
| **$O_2$** | 500 mL |
| **HC** | 7 g (as *n*-butane) |

### High Capacity Triple Filter Helium Specific

**Catalog No.** SGT-F0302

**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** | |
|---|---|
| **$H_2O$** | 1.8 g |
| **$O_2$** | 500 mL |
| **HC** | 7 g (as *n*-butane) |

### High Capacity Triple Filter Hydrogen Specific

**Catalog No.** SGT-F0304

**Specifications**

| | |
|---|---|
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 7 L/min. |
| **Usable For** | H2 |
| **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** | |
|---|---|
| **$H_2O$** | 1.8 g |
| **$O_2$** | 500 mL |
| **HC** | 7 g (as *n*-butane) |

# Super Clean™ Gas Filters for LC/MS



Kit Part No. **SGT-B1021-B4**

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.



Kit Part No. **SGT-B1022-B4**

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

**Catalog No.** SGT-F0720

| 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 |



### Hydrocarbon Removal

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

| Capacity | |
|---|---|
| **HC** | 24 g (as *n*-butane) |

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

**Catalog No.** SGT-F0722

| 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 |



### Indicating Hydrocarbon

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

| Capacity | |
|---|---|
| **HC** | 24 g (as *n*-butane) |

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

**Catalog No.** SGT-F0721

| Specifications | |
|---|---|
| **Outlet Gas Quality (%)** | > 99.9999 |
| **Maximum Pressure** | 11 bar (160 psi) |
| **Maximum Flow** | 20 L/min. |
| **Usable For** | Inert carrier gas, He, H2, N2, AR, Air |
| **Dimensions** | 24 cm x Ø 4.4 cm |
| **Weight** | 0.26 Kg |
| **Estimated Lifetime** | 3 to 6 months |



### 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 higly recommend installing a moisture trap before the hydrocarbon and oxygen traps on all carrier gas lines.

| Capacity | |
|---|---|
| **$H_2O$** | 7.2 g |

# Ordering Information

## Super Clean™ Filter and Base plate Kits



| Part No. * | Description | qty. |
|---|---|---|
| SGT-B1010-B8 | SGT 1 Triple Filter Kit - 1/8" Brass<br>Includes (1) 1 position base plate with 1/8" Brass inlet/outlet fittings and (1) Oxygen/Moisture/Hydrocarbon Trap | kit |
| SGT-B1011-B8 | SGT 1 Triple Helium Specific Filter Kit - 1/8" Brass<br>Includes (1) 1 position base plate with 1/8" Brass inlet/outlet fittings and (1) Oxygen/Moisture/Hydrocarbon Helium Specific Trap | kit |
| SGT-B1012-B8 | SGT 1 Triple Hydrogen Specific Filter Kit - 1/8" Brass<br>Includes (1) 1 position base plate with 1/8" Brass inlet/outlet fittings and (1) Oxygen/Moisture/Hydrocarbon Hydrogen Specific Trap | kit |
| SGT-B1020-B8 | SGT 2 Combi Filters Kit - 1/8" Brass<br>Includes (1) 2 position base plate with 1/8" Brass inlet/outlet fittings and (2) Hydrocarbon/Moisture Traps | kit |
| SGT-B1030-B8 | SGT 3 Filters Kit - 1/8" Brass<br>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 |
| SGT-B1040-B8 | SGT 4 Filters Kit - 1/8" Brass<br>Includes (1) 4 position base plate with 1/8" Brass inlet/outlet fittings and (1) Moisture Trap, (1) Oxygen Trap, and (2) Hydrocarbon Traps | kit |

* Standard fittings are 1/8" Brass. All Kits are available in 1/4" to 1/8" Brass and Stainless steel fittings. To order replace Part No. suffix into '-B4' for 1/4" Brass, '-S8' for 1/8" Stainless steel and '-S4' for 1/4" Stainless steel fittings. Price upon request.

## Super Clean™ Replacement Filter Bundles



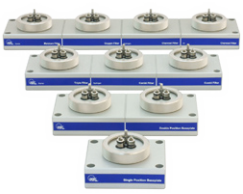
| Part No. | Description | qty. |
|---|---|---|
| SGT-F0730 | SGT Filter Bundle of 3<br>Includes (1) Oxygen/Moisture/Hydrocarbon Trap and (2) Hydrocarbon/Moisture Traps | bundle |
| SGT-F0740 | SGT Filter Bundle of 4<br>Includes (1) Moisture Trap, (1) Oxygen Trap, and (2) Hydrocarbon Traps | bundle |

## Super Clean™ Replacement Filters



| Part No. | Description | qty. |
|---|---|---|
| SGT-F0101 | SGT Moisture Filter | ea. |
| SGT-F0102 | SGT Oxygen Filter | ea |
| SGT-F0103 | SGT Hydrocarbon Filter | ea. |
| SGT-F0104 | SGT Hydrocarbon with AT indicator Filter | ea. |
| SGT-F0201 | SGT Combi (Hydrocarbon/Moisture) Filter | ea. |
| SGT-F0301 | SGT Triple (Oxygen/Moisture/Hydrocarbon) Filter | ea. |
| SGT-F0303 | SGT Triple (Oxygen/Moisture/Hydrocarbon) with AT indicator Filter | ea. |
| SGT-F0302 | SGT Triple (Oxygen/Moisture/Hydrocarbon) Helium-specific Filter | ea. |
| SGT-F0304 | SGT Triple (Oxygen/Moisture/Hydrocarbon) Hydrogen-specific Filter | ea. |

## Super Clean™ Filter Base plates



| Part No. * | Description | qty. |
|---|---|---|
| SGT-B0010-B8 | SGT Base plate 1 Position - 1/8" Brass | ea. |
| SGT-B0020-B8 | SGT Base plate 2 Position - 1/8" Brass | ea. |
| SGT-B0030-B8 | SGT Base plate 3 Position - 1/8" Brass | ea. |
| SGT-B0040-B8 | SGT Base plate 4 Position - 1/8" Brass | ea. |

* Standard fittings are 1/8" Brass. All base plates are available in 1/4" to 1/8" Brass and Stainless steel fittings. To order replace Part No. suffix into '-B4' for 1/4" Brass, '-S8' for 1/8" Stainless steel and '-S4' for 1/4" Stainless steel fittings. Price upon request.

# Ordering Information

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



| Part No. | Description | qty. |
|---|---|---|
| B0130 | Flush Cap Replacement Set | 2-pk. |

## Wall mounting Bracket for all Cartridge base plates



| Part No. | Description | qty. |
|---|---|---|
| B0050 | Wall-mounting Bracket Set | ea. |

## Replacement O-Rings for all Cartridge base plates



| Part No. | Description | qty. |
|---|---|---|
| B0110 | Base plate O-ring Replacement Set | 20-pk. |

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



| Part No. | Description | qty. |
|---|---|---|
| B0120 | Connector Set - 1/4" Brass | 6-pk |
| B0121 | Connector Set - 1/8" Brass | 6-pk |
| B0122 | Connector Set - 1/4" Stainless steel | 6-pk. |
| B0123 | Connector Set - 1/8" Stainless steel | 6-pk. |

## Super Clean™ Filter and Base plate Kits for LC/MS



| Part No. * | Description | qty. |
|---|---|---|
| SGT-B1021-B4 | SGT High Flow Hydrocarbon Filter Kit - 1/4" Brass<br>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 |
| SGT-B1022-B4 | SGT High Flow Moisture Filter Kit - 1/4" Brass<br>Includes (1) 2 position high flow base plate with 1/4" Brass inlet/outlet fittings, (2) High Flow Moisture Traps, and a 1/4" Brass Particle Filter | kit |

* Standard fittings are 1/4" Brass. All LC/MS Kits are available in 1/4" Brass and Stainless steel fittings. To order replace Part No. suffix into '-S4' for 1/4" Stainless steel fittings. Price upon request.

## Super Clean™ Replacement Filter Bundles for LC/MS



| Part No. | Description | qty. |
|---|---|---|
| SGT-F0720 | SGT High Flow Hydrocarbon Filter Bundle<br>Includes (2) High Flow Hydrocarbon Traps | bundle |
| SGT-F0722 | SGT High Flow Indicating Hydrocarbon Filter Bundle<br>Includes (2) High Flow Indicating Hydrocarbon Traps | bundle |
| SGT-F0721 | SGT High Flow Moisture Filter Bundle<br>Includes (2) High Flow Moisture Traps | bundle |

## Super Clean™ Base plate for LC/MS



| Part No. * | Description | qty. |
|---|---|---|
| SGT-B0021-B4 | SGT High Flow Base plate 2 Position - 1/4" Brass<br>Includes 1/4" Brass Particle Filter | ea. |

* Standard fittings are 1/4" Brass. LC/MS base plate is available in 1/4" Brass and Stainless steel fittings. To order replace Part No. suffix into '-S4' for 1/4" Stainless steel fittings. Price upon request.

# Ordering Information

## Particle Filter for LC/MS



| Part No. | Description | qty. |
|---|---|---|
| B0060 | 0.5 Micron Particle Filter (1/4" Brass) | ea. |
| B0065 | 0.5 Micron Particle Filter Cup Replacement Pack | 12-pk. |

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



| Part No. | Description | qty. |
|---|---|---|
| B0124 | High Flow Connector Set - 1/4" Brass | 6-pk. |
| B0125 | High Flow Connector Set - 1/4" Stainless steel | 6-pk. |

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



| Part No. | Description | qty. |
|---|---|---|
| B0131 | High Flow Flush Cap Replacement Set | 2-pk. |

Authorised Reseller