Enhance Your GC/MS Productivity and Accuracy

Agilent GC/MS columns and supplies
Optimize Every Step of Your GC/MS Workflow

Are you losing analytes due to active sites, or poor deactivation of the liner or column? Could leaky GC connections be contributing to high background noise? Are you maintaining sample integrity to the highest possible degree?

Analytical success depends on more than just the sensitivity of your instrument. You must also choose the highest-quality columns and supplies for each stage of your workflow. Agilent J&W GC columns and supplies enhance the sensitivity and performance you get from your instrument. They include:

- **Exclusive Agilent Inert Flow Path solutions.** Inert inlets, together with Agilent Ultra Inert inlet liners and columns, ensure that your entire sample reaches the detector for accurate trace-level analysis.

- **Intelligent consumables.** Smart keys for Agilent J&W GC columns provide information such as column use, configuration, age, number of injections, and temperature limits. They also include default configuration parameters.

- **Gas Clean filters with Smart sensors.** The Agilent Gas Clean filter system delivers clean gases, reducing the risk of column damage, sensitivity loss, and downtime. The Smart sensor automatically notifies you when the filters become saturated and need replacing.

It all adds up to less worry, reduced rework, and more productivity for your lab.
Sample preparation is an essential part of your GC/MS workflow. It extends column life, reduces rework, and minimizes interferences that can jeopardize your separation, detection, and quantification. Agilent offers a complete line of sample preparation products for diverse instruments to ensure that you get accurate, reproducible results every time.

**Agilent Bond Elut SPE**
Choose from over 40 sorbents to find the best solid phase extraction product for your analysis. Many cartridge formats and 96-well plate configurations are also available.

**Agilent Bond Elut QuEChERS**
Not all QuEChERS kits are created equal. Agilent Bond Elut QuEChERS kits deliver improved reproducibility, optimal sample cleanup for diverse matrices, and the time-saving convenience of preweighed kits.

**Agilent Captiva EMR–Lipid**
Streamline your protein precipitation workflow while maximizing matrix removal. With Captiva EMR–Lipid, you can achieve phospholipid removal and smaller RSD without adding time to your workflow.

**Agilent Captiva syringe filters and filter vials**
Even small amounts of particulates can ruin your column and results. Captiva Premium syringe filters, Econofilters, and filter vials remove damaging particulates and are the ideal choice for simple mechanical filtration.

**Agilent Chem Elut S**
Achieve consistent results, day to day and analyst to analyst. Chem Elut S synthetic SLE products are optimized to deliver superior reproducibility, sample capacity, and data quality.

**Agilent SPME Arrows and fibers**
Next-generation SPME Arrows demonstrate 10 times the sensitivity of traditional SPME fibers. Ideal for headspace analysis, or immersion in a liquid to concentrate analyte on the Arrow.
Maximize Your Results with Agilent J&W GC Columns

Agilent offers the industry’s widest portfolio of MS-grade columns, engineered for low bleed, high-thermal stability, and excellent inertness. Our arylene phase technology and siloxane manufacturing processes ensure excellent performance for the broadest range of compounds—including active analytes, acids, bases, and highly substituted compounds.

### Which column is right for you?

<table>
<thead>
<tr>
<th>Agilent Phase</th>
<th>Similar Phases</th>
<th>Application</th>
<th>Composition/Notes</th>
<th>USP</th>
</tr>
</thead>
</table>
| DB-1ms Ultra Inert | Rxi-1ms, ZB-1ms, SLB-1ms, SolGel-1ms | General purpose, hydrocarbons, sulfur compounds, flavors/fragrances, phenols, PCBs | • 100% dimethylpolysiloxane  
• Nonpolar  
• -60 to 325/350 °C | G1, G2, G38 |
| DB-5ms Ultra Inert | Rxi-5Sil MS, Rxi-5ms, Rtx-5MS, ZB-5MS, ZB-5MSplus, SLB-5ms, BPS5MS | General purpose, semivolatiles, halogenated compounds, pesticides, herbicides, amines, unknown sample screening | • 5% phenyl, 95% dimethyl arylene siloxane  
• Nonpolar  
• -60 to 325 °C | G27, G36 |
| DB-35ms Ultra Inert | Rxi-35Sil MS, ZB-35, SLB-35ms, BPS35 | Aroclors, pharmaceuticals, CLP pesticides, chlorinated herbicides, PCBs, EPA 508.1 pesticides | • 35% phenyl, 65% dimethyl arylene siloxane  
• Midpolar  
• 50 to 340/360 °C | G42 |
| DB-17ms | Rxi-17Sil MS, ZB-50, SP-2250, BPX50 | Drugs, glycols, pesticides, steroids | • 50% phenyl, 50% dimethyl arylene siloxane  
• Midpolar  
• 40 to 320/340 °C | G3 |
| VF-1701ms | Rtx-1701, ZB-1701, SPB-1701, BP10 | Pesticides, PCBs, semivolatiles | • 14% cyanopropylphenyl, 86% polydimethylsiloxane  
• Midpolar  
• -20 to 280/300 °C | G46 |
| VF-624ms | Rxi-624Sil MS, Rtx-624, ZB-624plus, SPB-624, BP624 | Volatiles, residual solvents | • 6% cyanopropylphenyl, 94% dimethylpolysiloxane  
• Midpolar  
• -40 to 280/300 °C | G43 |
| DB-225ms | Rtx-225, SPB-225 | FAMEs, alditol acetates, neutral sterols | • 50% cyanopropylphenyl, 50% dimethylpolysiloxane  
• Polar  
• 40 to 220/240 °C | G7, G19 |
| VF-23ms | Rtx-2330, SP-2330, SP-2340, BPX70 | FAMEs, dioxins, aromatic compounds | • Highly substituted cyanopropyl phase  
• Polar  
• 40 to 260 °C | G48 |
| VF-200ms | Rtx-200, Rtx-200MS | Ketones, aldehydes, nitro- or chloro-containing compounds, PAHs, unsaturated compounds, silanes, CFCs | • Trifluoropropyl methylpolysiloxane  
• Polar  
• 0 to 325/350 °C | G6 |
| VF-Xms | Rtx-XLB | Pesticides, semivolatiles, solvents, phenols, PAHs, aromatics | • Proprietary phases  
• Low-bleed, more polar alternative to VF-5ms  
• 30 to 340/360 °C | None |
| VF-WAXms | Stabilwax-MS, Stabilwax, Rtx-Wax, ZB-WAX, ZB-WAXplus, Supelcowax 10, SolGel-WAX | Alcohols, solvents, FAMEs, food/flavor/fragrance compounds, aromatics | • Polyethylene glycol  
• Polar  
• 20 to 250/260 °C | G14, G15, G16, G20, G39 |

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**GC columns with smart key**

Immediately identify your GC column and monitor its use. For a complete list of GC columns with smart key, [click here](#).

*Compatible with the Agilent 8890 GC system only.*

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**Columns, supplies, and fittings for the Agilent Intuvo 9000**

Agilent Intuvo transforms your GC experience with its efficiency and cost effectiveness. It’s the perfect partner for Agilent 5977B, 7000D, and 7010B MS systems. Specially designed Intuvo supplies include ferrule-free fittings, Guard Chip retention gap technology, and no-trim columns. For a complete list, [click here](#).
High-quality supplies

Improve Your Scientific Outcomes

Sample introduction and containment

Agilent A-Line vials: ultimate performance for your precious samples

Agilent A-Line autosampler vials are, simply put, the best vials available today. They are manufactured using inert first hydrolytic type 1 borosilicate glass with a 51 COE, and are designed to work perfectly with Agilent instruments. What’s more, every A-Line vial is shipped with a Certification of Analysis that confirms vial appropriateness.

Ordering information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Line crimp top vial, 2 mL, amber, with write-on spot, 100/pk</td>
<td>5190-9592</td>
</tr>
<tr>
<td>A-Line crimp top vial, 2 mL, clear, with write-on spot, 100/pk</td>
<td>5190-9591</td>
</tr>
<tr>
<td>A-Line screw top vial, 2 mL, amber, with write-on spot, 100/pk</td>
<td>5190-9590</td>
</tr>
<tr>
<td>A-Line screw top vial, 2 mL, clear, with write-on spot, 100/pk</td>
<td>5190-9589</td>
</tr>
</tbody>
</table>

Recommended caps for A-Line vials

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screw cap, bonded, blue, PTFE/white silicone septa, 100/pk</td>
<td>5190-7021</td>
</tr>
<tr>
<td>Screw cap, bonded, blue, pre-slit, PTFE/white silicone septa, 100/pk</td>
<td>5190-7023*</td>
</tr>
<tr>
<td>Crimp cap, silver aluminum, PTFE/white silicone septa, 100/pk</td>
<td>5182-0552</td>
</tr>
</tbody>
</table>

*Recommended for high volume injections.

Reduce bleed with certified nonstick inlet septa

Exclusive Agilent bleed and temperature optimized (BTO) inlet septa are plasma-treated to eliminate sticking and coring. So your inlet stays free of external contamination. Blister-packed for cleanliness and convenience.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 mm BTO septa, 50/pk</td>
<td>5183-4757</td>
</tr>
<tr>
<td>5 mm BTO septa, through-hole for on-column injection, in glass jar, 50/pk</td>
<td>5183-4758</td>
</tr>
</tbody>
</table>
GC flow path supplies

New fritted liners: longer lasting and more inert

Agilent Ultra Inert fritted liners feature a filter frit instead of glass wool. So you don’t have to worry about glass wool fragments migrating through your GC flow path and creating active surfaces. They are capable of lasting up to twice as long as glass wool liners, too.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liner, UI, glass-fritted, middle</td>
<td>5190-5105</td>
</tr>
<tr>
<td>Liner, UI, glass-fritted, bottom</td>
<td>5190-5112</td>
</tr>
</tbody>
</table>

Maximize consistency with Ultra Inert inlet liners

Prevent adsorption and ensure accurate sample transfer onto the GC column through a robust deactivated surface. Our liners are FID- and MSD-tested for acid-base deactivation, response linearity, peak symmetry, bleed, and background noise. Plus, installation is a breeze thanks to our touchless packaging.

<table>
<thead>
<tr>
<th>Description</th>
<th>Single-Pack</th>
<th>5-Pack</th>
<th>25-Pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liner, UI, splitless, single-taper, glass wool</td>
<td>5190-2293</td>
<td>5190-3163</td>
<td>5190-3167</td>
</tr>
<tr>
<td>Liner, UI, split, straight, glass wool</td>
<td>5190-2294</td>
<td>5190-3164</td>
<td>5190-3168</td>
</tr>
<tr>
<td>Liner, UI, universal, low pressure drop, glass wool</td>
<td>5190-2295</td>
<td>5190-3165</td>
<td>5190-3169</td>
</tr>
</tbody>
</table>

Enhance your system’s inertness with certified gold seals

A proprietary manufacturing process delivers a consistent, smooth, and inert surface to seal the inlet—preventing leaks and sample degradation. Necessary when working with active compounds or high-sensitivity analyses.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified gold seal with washer</td>
<td>5188-5367</td>
</tr>
<tr>
<td>Ultra Inert gold seal with washer</td>
<td>5190-6145</td>
</tr>
</tbody>
</table>
Optimize GC/MS sensitivity with leak-free, preconditioned ferrules

Vespel/graphite capillary column ferrules and MS interface ferrules reduce column bleed and allow lower levels of detection. A convenient dispenser pack keeps ferrules clean until use.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.27 mm id, for 0.10 mm id columns</td>
<td>5062-3518</td>
</tr>
<tr>
<td>0.37 mm id, for 0.20 mm id columns</td>
<td>5062-3516</td>
</tr>
<tr>
<td>0.40 mm id, for 0.25 mm id columns</td>
<td>5181-3323</td>
</tr>
<tr>
<td>0.47 mm id, for 0.32 mm id columns</td>
<td>5062-3514</td>
</tr>
</tbody>
</table>

Self Tightening column nuts make column installation easier

Our stainless steel GC column nuts deliver a reliable connection without expensive upgrades or adaptors. Their finger-tight design lets anyone in your lab make consistent connections without tools. Plus, a newly added locking collar holds your column in place for accurate column depth and ferrule positioning.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Tightening column nut, inlet/detector</td>
<td>G3440-81011</td>
</tr>
<tr>
<td>Self Tightening column nut, MSD</td>
<td>G3440-81013</td>
</tr>
</tbody>
</table>

Nonstick liner certified O-rings: cleaner and less sticky

Proprietary precleaning, plasma treating, and conditioning eliminate outgassing of contaminants for reliable MSD analysis.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified nonstick fluorocarbon O-rings, 10/pk</td>
<td>5188-5365</td>
</tr>
</tbody>
</table>
Clean gas solutions reduce column damage and sensitivity loss

High-efficiency, high-capacity renewable gas purifier
- Reduces oxygen, moisture, and carbon contamination to minimize column bleed.
- Ensures longer column life and less frequent detector maintenance.
- Minimizes the impact of nitrogen in the source. Canister design is well suited for GC/QQQ applications.

Bonus: Return spent cartridges to Agilent. You’ll receive a credit, and help the environment too.

Gas Clean filter
- Removes contaminants to ensure that the highest-quality gas flows through the system leak free.
- Maintains flow path inertness and column integrity.
- Protects instrument with highly sensitive indicators.

Gas Clean sensor (available for Agilent 8890 and 8860 GC systems)
- Monitors chemical indicators.
- Alerts you when a filter is saturated and needs replacing.

Replacing the filters when they have reached absorption capacity ensures maximum protection of your flow path and columns.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas purifier startup kit:</td>
<td></td>
</tr>
<tr>
<td>• Cartridge</td>
<td></td>
</tr>
<tr>
<td>• Base</td>
<td></td>
</tr>
<tr>
<td>• Wall/bench mounting hardware</td>
<td></td>
</tr>
<tr>
<td>• Return packaging</td>
<td></td>
</tr>
<tr>
<td>• Instructions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G3440-60004</td>
</tr>
<tr>
<td>Recharged gas purifier cartridge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G3440-69003</td>
</tr>
<tr>
<td>Gas Clean filter: Intuvo kit</td>
<td>CP17995</td>
</tr>
<tr>
<td>Gas Clean filter: 7890 kit</td>
<td>CP17988</td>
</tr>
<tr>
<td>Gas Clean filter: 8890/8860 kit (includes Gas Clean sensor)</td>
<td>CP179880</td>
</tr>
<tr>
<td>Gas Clean carrier gas purifier, 1/pk</td>
<td>CP17973</td>
</tr>
</tbody>
</table>
Your GC/MS system was shipped with a "check out" column, which is the HP-5ms Ultra Inert, 30 m x 0.25 mm x 0.25 μm. This column was used to quality check the instrument's performance before shipping.

We recommend these products for your initial supply order

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Part Number</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean filter: 8890/8860 kit</td>
<td>1</td>
<td>CP179880</td>
<td>Includes Gas Clean sensor</td>
</tr>
<tr>
<td>MSD filament (EI)</td>
<td>1</td>
<td>G7005-60061</td>
<td>Optimal performance for high temperatures</td>
</tr>
</tbody>
</table>
| Ultra Inert gold seals                     | 1        | 5190-6144   | • Smoothest surface  
• Proprietary gold plating and Ultra Inert technology for the tightest seals and inert surface  
• Prevents leaks and/or sample degradation                                                                                     |
| Certified liner O-rings                    | 10/pk    | 5188-5365   | • Eliminate outgassing of contaminants critical for trace analysis  
• Plasma-treated to prevent sticking                                                                                              |
| Certified nonstick BTO septa, 11 mm red    | 50/pk    | 5183-4757   | • Ideal for low-bleed MS capillary columns  
• Individually packaged                                                                                                             |
| Certified preconditioned Vespel/graphite ferrule, 0.1, 0.2, 0.25 mm column id | 10/pk    | 5062-3508   | • Easy-to-use stable seal and higher-temperature limit  
• Easily removed  
• Recommended for GC/MS transfer lines for column diameters up to 250 μm                                                                 |
| Ultra Inert inlet liners                   | 25/pk    | 5190-3167   | • Inlet liner, Ultra Inert, splitless, single taper, glass wool  
• For split liner (4 mm), use p/n 5190-2295 (single liner)                                                                             |
| Autosampler syringes (tapered, fixed needle) | 6/pk    | G4513-80200 | • Use with split/splitless or on-column injections  
• 10 μL 23-26s/42/cone                                                                                                               |
| 2 mL vials with blue screw cap             | 500/pk   | 5182-0732   | • Packed in a reusable six-drawer cabinet with screw caps and installed septa for convenience and cleanliness  
• Septa is PTFE/red silicone rubber                                                                                                  |

To see our complete line of MS supplies, download our quick reference guide.
You’ll also need these supplies

<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| GC startup kit    | 1        | 19199M      | Contains the tools you’ll need to maintain your GC:  
• Nuts and ferrule kit  
• Copper tubing (50’ x 1/8”)  
• 1/8” tees (brass, 4/pk)  
• Tubing cutter (1/8”- 5/8”)  
• OD tubing  
• 1/8” brass caps (6/pk)  
• Screwdrivers and wrenches  
Gas purifier not included (if you need a helium Ar/Me trap, use p/n 19199N) |
| Column cutter     | 1        | 5181-8836   | Make clean and easy cuts in many types of capillary columns                                                                           |
| Gas regulator     | 1        | 5183-4644   | • For U.S. only  
• CGA 580 for He, Ar, or N₂  
• For 1/8” tubing                                                                         |
| Leak detector     | 1        | G3388B      | • Handheld electronic with LCD display and audible alert tone  
• Rechargeable battery                                                                     |
| Flow meter        | 1        | G6691A      | • ADM Flow Meter                                                                                                                       |

Don’t forget preventive maintenance

Regular preventive maintenance can reduce unexpected repairs by 24%.* During your annual GC/MS preventive maintenance service, your Agilent service engineer will:

- Inspect your entire system  
- Clean fans, vents, inlets, and detectors  
- Clean the ion source  
- Perform vacuum system maintenance  
- Verify/autotune vacuum pressure  
- Maintain service logs

Learn more at www.agilent.com/chem/services

*Based on a five-year study of more than 38,000 service calls on Agilent and non-Agilent instruments, conducted by an independent actuarial firm.
Agilent CrossLab services. From insight to outcome.

CrossLab is an Agilent capability that integrates services and consumables to support workflow success and important outcomes like improved productivity and operational efficiency. Through CrossLab, Agilent strives to provide insight in every interaction to help you achieve your goals. CrossLab offers method optimization, flexible service plans, and training for all skill levels. We have many other products and services to help you manage your instruments and your lab for best performance.

Learn more about Agilent CrossLab, and see examples of insight that leads to great outcomes, at www.agilent.com/crosslab

Learn more:
www.agilent.com/chem/gc

Find a local Agilent customer center:
www.agilent.com/chem/store

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