



Agilent Columns and Supplies

Productivity and accuracy enhancements

for your GC/MS instrument

Our measure is your success.



products | applications | software | services



Agilent Technologies

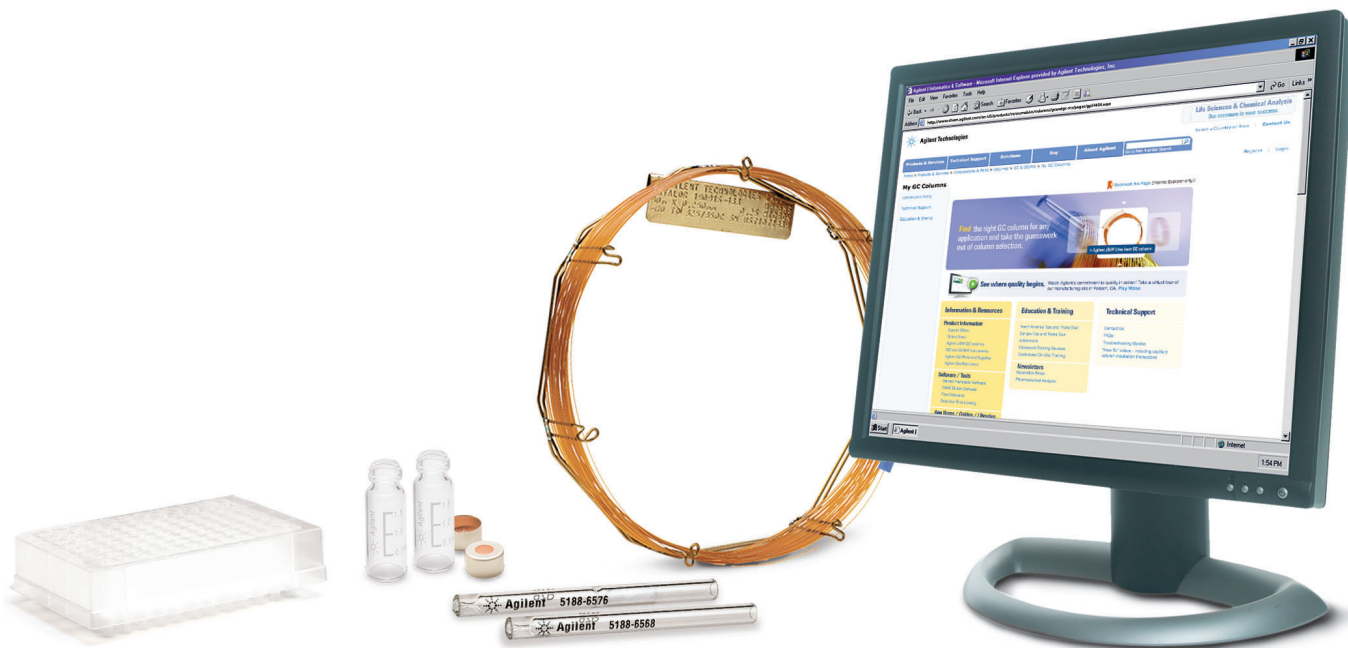
Optimize every step of your GC/MS analysis with Agilent Technologies columns and certified supplies.

Get the best possible performance from your new GC/MS instrument with Agilent columns and supplies.

When you set out to complete an analysis, you're relying not just on the sensitivity of the instrument you're using, but on the quality of the column you select and on all the supplies being used at each stage. Can you be sure that your analytes aren't lost due to active sites (or poor deactivation) of the liner or column? Is your sample integrity maintained to the highest degree possible?

There's a lot to worry about. Inferior septa can degrade, causing bleed or releasing particles into your inlet liner that can lead to downtime. A poorly sealed inlet can harm your sample quality. Inferior columns introduce doubt into your chromatographic analysis and cause rework.

Using Agilent J&W GC columns and Agilent certified supplies enhances the sensitivity and performance you get from your instrument. Agilent tightly controls the specifications for every column and supply it sells. In many cases, Agilent adds several manufacturing steps beyond the "standard" processes that others might use, so that the product is premium and optimized to the exacting standards that your work demands. Agilent packaging is specially designed to keep certified supplies clean in storage. *This all adds up to less worry, less rework and more productivity for your lab.*



Certified supplies for your GC/MS systems:

We take the time to ensure the purity and quality of your supplies – so you don't have to!

Reduce bleed with Certified Non-Stick Bleed and Temperature Optimized (BTO) Inlet Septa.

Exclusive Agilent BTO septa are plasma-treated to eliminate sticking and coring, keeping the inlet free of external contamination. Our septa are blister-packed for cleanliness and convenience.



11 mm BTO septa, 50/pk	5183-4757
11 mm BTO septa, 100/pk	5183-4757-100
5 mm BTO septa through-hole for on-column injection, in glass jar, 50/pk	5183-4758

Non-Stick Liner Certified O-Rings are cleaner and less sticky – easier on you.

Proprietary pre-cleaning and conditioning procedures eliminate out-gassing of contaminants critical for trace analysis with MSD. Certified O-rings are plasma-treated to prevent sticking and unnecessary inlet maintenance.



Certified non-stick fluorocarbon O-rings, 10/pk	5188-5365
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MS-Certified Liners ensure consistency.

Agilent MS-Certified Liners are FID- and MSD-tested for acid/base deactivation response linearity, peak symmetry, bleed and background noise, so you get consistent quality. Our liners are individually packaged in airtight tubes that come labeled with lot identification.



Splitless, single-taper, deactivated, glass wool, 25/pk	5188-6566
Splitless, single-taper, deactivated, glass wool, 5/pk	5188-6567
Splitless, single taper, deactivated, glass wool, 1/pk	5188-6568
Split straight liner, deactivated, glass wool, 5/pk	5188-6569
Split straight liner, deactivated, glass wool, 1/pk	5188-6574
Split liner, single-taper with restriction to hold glass wool, 1/pk	5188-6576

Pre-Conditioned Vespel/Graphite Capillary Column Ferrules and MS Interface Ferrules help you optimize your GC/MS sensitivity.

The most reliable, leak-free column connections to reduce column bleed and allow lower levels of detection. The convenient dispenser pack keeps ferrules clean until use.



Injection Port	
0.27 mm id, 90% Vespel/10% Graphite, for 0.10 mm id columns	5062-3518
0.37 mm id, 90% Vespel/10% Graphite, for 0.20 mm id columns	5062-3516
0.40 mm id, 90% Vespel/10% Graphite, for 0.25 mm id columns	5181-3323
0.47 mm id, 90% Vespel/10% Graphite, for 0.32 mm id columns	5062-3514
0.74 mm id, 90% Vespel/10% Graphite, for 0.53 mm id columns	5062-3512
GC/MSD Interface	
0.3 mm id, 85% Vespel/15% Graphite, for 0.10 mm id columns	5062-3507
0.4 mm id, 85% Vespel/15% Graphite, for 0.20 mm id and 0.25 mm id columns	5062-3508
0.5 mm id, 85% Vespel/15% Graphite, for 0.32 mm id columns	5062-3506
0.8 mm id, 85% Vespel/15% Graphite, for 0.53 mm id columns	5062-3538

Enhance your system's inertness with Certified Gold Seals.

A unique, proprietary manufacturing process gives the most consistent, smooth and inert surface to seal the inlet and prevent leaks or sample degradation. A must when working with active compounds or high-sensitivity analyses.



Certified gold seal includes washer	5188-5367
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Need help figuring out which liner to use?

Go to www.agilent.com/chem/linerhelp

Agilent J&W GC/MS columns: Maximize your analytical results

Agilent offers the widest portfolio of MS-grade columns in the industry – specifically engineered to yield columns with low bleed, high-thermal stability and excellent inertness. This is achieved through *arylene phase technology* and *optimized siloxane manufacturing processes*. Each approach ensures excellent column performance for the broadest range of compounds, including chemically active analytes – acids, bases and highly substituted compounds.

Consider the following column families as you make your GC/MS column selection:

Agilent J&W Ultra Inert GC capillary columns

allow you to perform trace-level analysis of acids, bases or other active compounds with the utmost confidence. What's more, Agilent has set a new industry standard for column inertness testing by introducing a new Über One Test Probe Mixture that surpasses our most stringent demands for bleed, sensitivity and efficiency.

Agilent J&W Ultra Inert GC columns are the only GC columns that deliver on the promises of consistent column inertness performance and exceptionally low column bleed for greater sensitivity, better peak shape and more reliable results.

Agilent J&W columns are available for all GC/MS applications and in a wide variety of phases including*:

- DB-5ms Ultra Inert
- DB-17ms
- DB-35ms
- DB-225ms
- DB-XLB
- HP-5ms Ultra Inert
- HP-1ms and DB-1ms
- HP-5ms and DB-5ms

For more information on Agilent J&W GC Capillary columns, visit www.agilent.com/chem/mygccolumns

Agilent J&W High Efficiency GC capillary columns

are ideal for applications that require faster run times, such as high-throughput screening, process monitoring and method development. These columns can help reduce your sample run time – by 50% or more – without compromising your resolution. That improves your productivity, so you can meet the tightest time constraints. Agilent J&W High Efficiency columns can be ordered in any GC/MS phase by specifying the 0.18 ID size.



This is only a partial listing of GC and GC/MS columns.

*See the application chart on the back of this brochure for more information about these columns and others to help you select the right column for your method.

Reference Resources

www.agilent.com/chem/getguides – One-stop request for key guides to get you going
www.agilent.com/chem/mygccolumns – Great reference for Agilent J&W Capillary GC columns
www.agilent.com/chem/SampliQ – Learn about the new Agilent SampliQ SPE line
www.agilent.com/chem/linerhelp – Learn about Agilent MS-Certified Liners
www.agilent.com/chem/vialsguide – Learn about the complete line of Agilent vials
www.agilent.com/chem/services – Learn about service plans and preventive maintenance recommendations
www.agilent.com/chem/store – Place orders online

SampliQ High-Performance Solid Phase Extraction (SPE)

Impurities in samples can contaminate results. Agilent SampliQ SPE will help you confidently extract and concentrate samples from complex matrices – so all your GC analyses are more accurate and reliable.

SampliQ SPE sets you up to be efficient and accurate all through your analysis. SampliQ sorbents and cartridges are made with the same exacting quality you've come to expect from Agilent instruments and columns. Now you can get that superior performance at the very beginning of your analysis. SampliQ SPE products:

- Offer Polymer, silica and other sorbents to meet every SPE requirement
- Help ensure reproducible results
- Provide cleaner, concentrated samples

SampliQ Polymer sorbents save time in method development and rework. New Agilent SampliQ Polymers allow for retention of target molecules over a wide pKa range. And unlike silica-based phases, they yield the same results if they inadvertently dry out during the conditioning stage – so you don't have to start over.

New Agilent SampliQ Optimized Polymer Technology (OPT) cartridges exhibit retention for both polar and non-polar compounds based on their combined hydrophilic and lipophilic characteristics, making it a very versatile SPE option.

POLYMERS

	OPT	DVB	SCX	SAX	PS-DVB
1 ml 30 mg, 100/pk	5982-3013	5982-3113	5982-3213	5982-3313	
3 ml 60 mg, 50/pk	5982-3036	5982-3136	5982-3236	5982-3336	
6 ml 150 mg, 30/pk	5982-3067	5982-3167	5982-3267	5982-3367	
6 ml 500 mg, 30/pk					5982-3165
6 ml 1000 mg, 30/pk					5982-3160



SILICA

Reversed Phase (Non-Polar)				
	C18	C18EC	C8	Phenyl
1 ml 100 mg, 100/pk	5982-1111	5982-1311	5982-1011	5982-1511
3 ml 200 mg, 50/pk	5982-1132	5982-1332	5982-1032	5982-1532
3 ml 500 mg, 50/pk	5982-1135	5982-1335	5982-1035	5982-1535
6 ml 500 mg, 30/pk	5982-1165	5982-1365	5982-1065	
6 ml 1000 mg, 30/pk	5982-1160	5982-1360		

Normal Phase (Polar)	
Silica	Amino
5982-2211	5982-1811
5982-2232	5982-1832
5982-2235	5982-1835
5982-2265	5982-1865
5982-2260	5982-1860

Additional sorbents available.

Visit www.agilent.com/chem/SampliQ for more information, part numbers and application notes.

Start with certified vials for consistency all through your analysis

Agilent optimizes the design of our vials and caps to work perfectly with our instruments. We stipulate well-defined specifications and tolerances and perform QA procedures to ensure we are certifying the right parameters. The septa in our vials are chromatographically tested to reduce any risk of contamination. Look for the Agilent logo silk-screened on the vials to ensure you've got Agilent-certified vial quality.



We recommend	
2 ml clear vials with write-on spot, crimp cap style 100/pk with silver aluminum crimp caps	5818-1210 (vials)/ 5182-0543 (caps) 500 qty.
2 ml clear vials with write-on spot	5181-3400 500 qty. each vials and caps with blue storage cabinet
2 ml screw-top clear vials with write-on spot, 100/pk and blue screw-on caps	5182-0715 (vials)/ 5182-0717 (caps) 500 qty.
2 ml screw-top vials with write-on spot	5182-0732 500 qty. vials and caps with blue storage cabinet

Agilent sells a complete range of vials to meet every need. Check out www.agilent.com/chem/vialsguide

Don't Forget Preventive Maintenance!

During your annual GC/MS PM 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

Studies show that regular Agilent PM visits **decrease failure rates by up to 25%**. For more information, please visit www.agilent.com/chem/services

Gas Purification

Increase system efficiency – and save money – with Renewable Gas Purifiers.

The high-efficiency, high-capacity Renewable Gas Purifier reduces oxygen, moisture and carbon contamination in GC gas streams to minimize column bleed, giving you longer column lifetime and less frequent detector maintenance. You can return spent cartridges to Agilent for refilling and receive credit for the return. That conserves the environment and saves money.



Startup kit: includes cartridge, base, wall/bench mounting hardware, return packaging and instructions

G3440-60004

Recharged cartridge

G3440-690003

Our chemists have put together a Chromatogram Library to help you find the right column. Go to www.agilent.com/chem and click "Literature Library."



Congratulations on your decision to purchase a new Agilent GC/MS instrument. Your GC/MS system was shipped with a “check out” column, which is the HP-5ms, 30 m x 0.32 mm x 0.25 µm. This column was used to quality check the instrument’s performance prior to shipping.

Recommended initial supply order:

Description	Qty	Part #	Notes
Renewable Gas Purification System	1	G3440-60004	A high-capacity – 850cc or more – Oxygen filtration, 12 g H ₂ O, and 8 g n-Butane. Cost-effective, compact gas purification system, which is environmentally friendly. Reduces oxygen, moisture and carbon contamination of GC gas streams to minimize column bleed – key to reducing downtime and maintenance.
MSD Filament (EI)	1	G2590-60053	Optimal performance for high temperatures.
Certified Gold Seals	1	5188-5367	Smoothest surface, plus Agilent proprietary gold plating, for the tightest seals and inert surface. Prevents leaks and/or sample degradation.
Certified Liner O-rings	10/pk	5188-5365	Eliminate out-gassing of contaminants critical for trace analysis. Plasma-treated to prevent sticking.
Certified Non-Stick Bleed and Temperature Optimized (BTO) – Septa 11 mm red	50/pk	5183-4757	Ideal for use with low-bleed, “Mass Spec” capillary columns, bleed and temperature-optimized non-stick inlet septa. Individually packaged.
Certified Pre-conditioned vespel/graphite ferrule, 0.1, 0.2, 0.25 mm column ID	10/pk	5062-3508	Vespel/graphite ferrules have an easy-to-use stable seal, higher-temperature limit and are easily removed. Recommended by Agilent for GC/MS transfer lines for column diameters up to 250 µm.
MS-Certified Liners	25/pk	5188-6566	Splitless, single-tapered, glass wool, deactivated. This liner ships with the 5975 GC/MS. For split liner (4 mm), use part number 5188-6576 (single liner).
Autosampler syringes – tapered, fixed needle	6/pk	5181-3360	Versatile for use with split/splitless or on-column injections. 10 µL 23-265/53/HP.
2 ml vials and caps 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.

First-time GC/MS purchaser? You’ll need these, too:

GC Startup Kit	1	19199M	Kit 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), various screwdrivers and wrenches. No gas purifiers included (if you need a Helium Ar/Me trap included, use 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 N ₂ for 1/8" tubing.
Leak Detector	1	G3388A	Handheld electronic with LCD display and Audible Alert tone. Rechargeable battery.
Flow Meter	1	5067-0223	Precision gas, range from 5-500 ml/min.

Request the guides you need to get the most from your instrument!

Go to www.agilent.com/chem/getguides to order a catalog, GC column selection guide and GC maintenance guide, or to request help from a columns and supplies specialist.

Let us help you find the right column for your application.

Use the chart below to help you determine which GC/MS columns are right for you.

Agilent Phase	Similar Phases	Application	Composition/Notes
DB-5ms Ultra Inert		Semivolatiles, halogenated compounds, pesticides, herbicides, drugs of abuse, amines, unknown sample screening	5% Phenyl 95% dimethyl arylene siloxane, non-polar, -60°C to 325/350°C
HP-5ms Ultra Inert		Semivolatiles, halogenated compounds, pesticides, herbicides, drugs of abuse, amines, unknown sample screening	5% Phenyl 95% dimethylpolysiloxane, non-polar, -60°C to 325/350°C
HP-1ms	DB-1ms, Rtx-1ms, VF-1ms, CP-Sil 5 CB Low Bleed/MS, MDN-1, AT-1, ZB-1ms, Equity-1	Amines, hydrocarbons, pesticides, PCBs, phenols, sulfur compounds, flavors and fragrances	100% dimethylpolysiloxane, non-polar, -60°C to 325/350°C
DB-1ms	HP-1ms, Rtx-1ms, Rxi-1ms, VF-1ms, CP-Sil 5 CB Low Bleed/MS, MDN-1, AT-1, ZB-1ms, Equity 1	Amines, hydrocarbons, pesticides, PCBs, phenols, sulfur compounds, flavors and fragrances	100% dimethylpolysiloxane, non-polar, -60°C to 325/350°C
HP-5ms	DB-5ms, Rtx, 5ms, Rtx-5 Amine, PTE-5, CP-Sil, 8 CB Low Bleed/MS, BPX-5, ZB-5ms, Equity-5	Semivolatiles, alkaloids, drugs, FAME, halogenated compounds, pesticides, herbicides	5% Phenyl 95% dimethylpolysiloxane, non-polar, from -60°C to 325/350°C
DB-5ms	Rtx-5ms, Rtx-5Sil MS, Rxi-5ms, Rxi-5Sil MS, VF-5ms, PTE-5, CP-Sil 8 CB Low Bleed/MS, BPX-5, AT-5ms, ZB-5ms, SLB-5ms, Equity-5	Semivolatiles, alkaloids, drugs, FAME, halogenated compounds, pesticides, herbicides	5% Phenyl 95% dimethyl arylene siloxane, non-polar, -60°C to 325/350°C
DB-35ms	Rtx-35, Rtx-35ms, VF-35ms, SPB-35, AT-35, Sup-Herb, MDN-35, BPX-35	CLP-pesticides, aroclors, pharmaceuticals, drugs of abuse, CLP Pesticides, Chlorinated Herbicides, PCBs, 508.1 Pesticides	35% Phenyl 65% dimethyl arylene siloxane, mid-polar, 50°C to 340/360°C
DB-17ms	HPD-50+, Rtx-50, CP-Sil 24 CB, 007-007-17 (MPS-50, SP-2250, SPB-50, ZB-50, AT-50)	Drugs, glycols, pesticides, steroids	50% Phenyl 50% dimethyl arylene siloxane, mid-polar, 40°C to 320/340°C
DB-225ms	HP-225, SP-2330, CP-Sil 43 CB, Rtx-225, BP-225, OV-225, ooy-225, AT-225	FAMES, alditol acetates, neutral sterols	50% Cyanopropyl-phenyl 50% dimethylpolysiloxane, Polar, 40°C to 220/240°C
DB-XLB Confirmation Column	Rtx-XLB, MDN-12	PCB Congener Analysis (209 Congeners), CLP Pesticides, Chlorinated Herbicides, PCBs, 508.1 Pesticides	Proprietary Phase non-polar, 30°C to 340/360°C

For a full selection of GC columns and part numbers, order our *GC Columns Selection Guide* (pub #5989-6159EN) online at www.agilent.com/chem/getguides. While you're there, order a copy of the *GC Maintenance Guide* (pub #5989-7612EN). Both are very helpful resources for using the GC/MS.

Still need help? E-mail for technical support at gc-column-support@agilent.com and check out www.agilent.com/chem/mygccolumns for more information.

For complete parts and ordering assistance, go to www.agilent.com/chem/store

Get the most from your instrument!

Go to www.agilent.com/chem/getguides to order a catalog.

Find an Agilent customer center in your country

www.agilent.com/chem/contactus

U.S. and Canada

1-800-227-9770

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Asia Pacific

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