Innovation with Purpose

# AGILENT INTUVO 9000 GC COLUMNS AND SUPPLIES



Agilent Technologies

Agilent **Intuvo** GC Columns 

## **AGILENT INTUVO—INNOVATION WITH PURPOSE**

Agilent has broken new ground in gas chromatography with the Agilent Intuvo 9000 GC, an innovative new breed of GC. Intuvo removes existing operational limitations, encouraging you to re-imagine workflows, efficiencies, and outcomes. What's more, Intuvo is the most cost-effective premium GC to own and operate, with a range of specially designed innovative columns and supplies. Bring Intuvo into your lab – and dream bigger.

Intuvo simplifies the process of getting predictably high quality GC results with a host of innovations that are genuinely enabling. As a result, Intuvo requires less training to use, so lab scientists can run more samples, easier, producing the data quality you need.

GC analyses are faster and more efficient with Intuvo. Analyses can be run up to twice as fast, using a quarter of the power of conventional GC systems, thanks to Intuvo's solid-state heating technology. What's more, Intuvo makes getting—and keeping—instruments in top operating condition a straightforward process. Intuvo automatically measures over 100 system touchpoints in real time, and shows critical instrument health information in an easy-to-read format. As a result, the days of fumbling and second guessing while trying to troubleshoot unexpected downtime are over, with Intuvo.



## The most intuitive GC columns and supplies ever

You will notice Intuvo's innovative range of supplies and fittings immediately when opening the oven door. These specially designed components include: ferrulefree fittings, Guard Chip retention gap technology, and no-trim columns.

With Intuvo's direct face seal connections, you will never have to fuss with a ferrule again. These click-andrun connections are made with an audible "click", so you know when a connection is made. Thus unplanned downtime due to leaks arising from incorrectly fitted ferrules is eliminated. Column trimming is eliminated with Intuvo thanks to Agilent's innovative Intuvo Guard Chip retention gap technology. The Guard Chip is a disposable chip that is easily installed and replaced in minutes. This chip provides almost a meter of sample flow path just before the Intuvo GC column. With protection like this, you will never need to trim a column again. A 15 m column will always be a 15 m column, no more peak shifting.

The powerfully simple Agilent Intuvo GC system transforms the way you do GC, clearing a completely new path to laboratory productivity.

## Intelligent. Intuitive. Innovative. Intuvo.



## **TABLE OF CONTENTS**

DREAM BIGGER—AGILENT INTUVO 9000	5
AGILENT J&W INTUVO GC COLUMNS	7
Ultra Inert	7
Low-Bleed GC/MS	9
Premium Polysiloxane	9
WAX-Polyethylene Glycol (PEG)	
GC Environmental Specialty	11
GC Forensic Specialty	
GC Petroleum Specialty	
AGILENT INTUVO SUPPLIES	13
Guard Chips	
Flow Chips	
Detector Tails	
Gaskets	
Ultra Inert Liners	
Ultra Inert Direct Connect Liners	
Nonstick Low-Bleed and Temperature Optimized (BTO) Septa	17
ADM Flow Meters	
Gas Clean Filters	
Installation Kits	
Parts and Tools	21
AGILENT SERVICE AND SUPPORT	



## **AGILENT INTUVO—DREAM BIGGER**



By removing existing operational limitations, Intuvo encourages you to re-imagine workflows, efficiencies, and outcomes. Bring Intuvo into your lab—and dream bigger.

#### **Optimal performance**

Achieved with any GC detector or single-/triple-quad mass spec.

#### Productivity

Intuvo is complimented by all of Agilent's GC sample introduction systems.

#### Intuitive

Touch-screen user interface displays critical instrument status information.

#### **Software control**

Intuvo is designed to allow installation and maintenance familiarization to be completed at a fraction of the time of a classical GC. And of course, there's no need to learn a new operating software—Intuvo runs on OpenLAB CDS for all GC applications and MassHunter for all GC/MS applications.

## **AGILENT INTUVO COLUMNS AND SUPPLIES**

An innovative range of supplies and fittings makes Intuvo the most efficient, cost-effective, premium GC to own and operate. This specially-designed range of supplies includes: ferrule-free fittings, Guard Chip retention gap technology, and no-trim columns, that transform your GC experience.



Intuvo Flow Chips are fitted with smart keys, meaning Intuvo knows exactly how to set itself up, whether for splitting, backflush, GC detectors, or mass spectrometry.



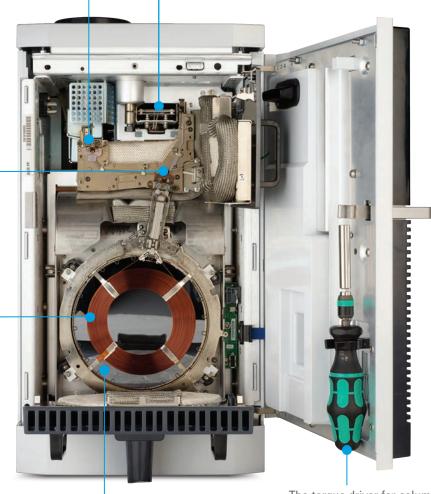
Gaskets take the place of ferrules, providing easy leak-free face seal connections for columns and detectors of the Intuvo flow path.



Intuvo columns are coated with industry proven chemistries in a revolutionary form factor. Smart keys enable immediate identification of the column configuration, temperature limits, and monitors usage.



Fast Guard Chip replacement makes troublesome column trimming and associated downtime a thing of the past.



Direct heating can save you time, and improve productivity in half the bench footprint.

The torque driver for column installation is mounted to the inside of your GC.

#### **Agilent J&W Intuvo GC Column Modules**

Intuvo columns are identical in dimensions, construction materials, and separation phase to the existing Agilent GC capillary columns you depend on for your everyday methods. This means that you can easily transfer your existing GC methods directly over to Intuvo.

Intuvo GC columns differ, however, in their compact, planar design, which works efficiently with the fast direct heating and cooling technology of Intuvo. Protected by the Intuvo Guard Chip, these columns never need to be trimmed, which eliminates time-consuming retention time adjustment. Finally, Intuvo columns are easily replaced using Agilent's patented Intuvo click-and-run connections. One click of a torque driver applies exactly the right force to seal the connection properly, providing audible and tactile feedback that the connection has been made. All Intuvo GC columns include a smart key, which enables the system to immediately identify the column configuration and temperature limits (including column part and serial numbers), as well as tracking the use of the column.

#### Agilent J&W Ultra Inert Intuvo GC Columns

#### Perform trace-level analysis with the utmost confidence

Achieve parts-per-billion – or parts-per-trillion – detection levels for your most demanding analyses with Agilent J&W Ultra Inert Intuvo GC columns. As part of the Agilent J&W Ultra Inert GC column family, these columns push industry standards for consistent column inertness and exceptionally low column bleed, resulting in lower detection limits and more accurate data for difficult analytes. Each Ultra Inert Intuvo GC column is tested with the industry's most demanding test probe mixture and we prove it with a performance summary sheet shipped with each column.



0.25 0.25 0.25 0.32	15 30 60	0.25 0.25 0.25	122-0112UI-INT 122-0132UI-INT
0.25	60		
		0.25	100 0100UU INIT
0.32	0.0		122-0162UI-INT
	30	0.25	123-0132UI-INT
0.25	30	0.25	19091S-933UI-INT
0.32	15	0.25	19091S-911UI-INT
0.32	30	0.25	19091S-913UI-INT
0.18	20	0.18	121-5522UI-INT
0.18	20	0.36	121-5523UI-INT
0.25	15	0.25	122-5512UI-INT
0.25	30	0.25	122-5532UI-INT
0.25	30	0.50	122-5536UI-INT
0.25	60	0.25	122-5562UI-INT
0.32	30	0.25	123-5532UI-INT
	0.32 0.32 0.18 0.18 0.25 0.25 0.25 0.25 0.25	0.32 15   0.32 30   0.18 20   0.18 20   0.25 15   0.25 30   0.25 30   0.25 60	0.32   15   0.25     0.32   30   0.25     0.18   20   0.18     0.18   20   0.36     0.25   15   0.25     0.25   30   0.25     0.25   30   0.25     0.25   30   0.25     0.25   60   0.25

(Continued)

## AGILENT J&W INTUVO GC COLUMNS

Phase	id (mm)	Length (m)	Film (µm)	Part No.
HP-5ms Ultra Inert	0.25	5	0.25	19091S-430UI-INT*
	0.25	15	0.25	19091S-431UI-INT
	0.25	30	0.25	19091S-433UI-INT
	0.25	30	0.50	19091S-133UI-INT
	0.25	60	0.25	19091S-436UI-INT
	0.32	30	0.25	19091S-413UI-INT
DB-35ms Ultra Inert	0.25	15	0.25	122-3812UI-INT
	0.25	30	0.25	122-3832UI-INT
	0.32	30	0.25	123-3832UI-INT
DB-624 Ultra Inert	0.18	20	1.00	121-1324UI-INT
	0.25	30	1.40	122-1334UI-INT
	0.25	60	1.40	122-1364UI-INT
	0.32	30	1.80	123-1334UI-INT
	0.32	60	1.80	123-1364UI-INT
DB-WAX Ultra Inert	0.25	30	0.25	122-7032UI-INT
	0.25	30	0.50	122-7033UI-INT
	0.25	60	0.25	122-7062UI-INT
	0.32	30	0.25	123-7032UI-INT
	0.32	30	0.50	123-7033UI-INT
	0.32	60	0.50	123-7063UI-INT
DB-UI 8270D	0.18	20	0.36	121-9723-INT
Ultra Inert	0.25	30	0.25	122-9732-INT
	0.25	30	0.50	122-9736-INT

 $\ensuremath{^*\text{This}}$  configuration is ideal for mid-column backflush applications.

The compact, planar design of Intuvo GC columns works efficiently with the fast direct heating and cooling technology of Intuvo.

### Agilent J&W Low-Bleed Intuvo GC/MS Columns

These ms columns are specifically designed to separate a broad range of trace-level samples and offer low bleed and high inertness even at higher temperatures. Unique polymer chemistry and proprietary surface deactivation make these classic ms-grade columns exceptional, ensuring columns adhere to the tightest quality control specifications in the industry for bleed, inertness, selectivity, and efficiency.

Phase	id (mm)	Length (m)	Film (µm)	Part No.
DB-5ms	0.25	30	0.25	122-5532-INT
HP-5ms	0.25	30	0.25	19091S-433-INT
DB-17ms	0.25	30	0.25	122-4732-INT
	0.32	30	0.25	123-4732-INT

#### Agilent J&W Premium Polysiloxane Intuvo GC Columns

Agilent J&W Polysiloxane Intuvo columns are stable, robust, and versatile and are available in a wide variety of stationary phases.

	Phase	id (mm)	Length (m)	Film (µm)	Part No.
	DB-1	0.32	5	0.33	123-100A-INT
		0.32	30	1.00	123-1033-INT
	HP-1	0.32	30	4.00	19091Z-613-INT
	ULTRA-2	0.32	50	0.52	19091B-115-INT
	DB-XLB	0.25	30	0.25	122-1232-INT
		0.32	30	0.50	123-1236-INT
	DB-1701	0.25	30	0.25	122-0732-INT
		0.25	30	1.00	122-0733-INT
		0.32	30	0.25	123-0732-INT
		0.32	30	1.00	123-0733-INT
	DB-23	0.25	30	0.25	122-2332-INT
n More		0.25	60	0.15	122-2361-INT
r in Gasoline		0.25	60	0.25	122-2362-INT
nt publication 5991-7178EN	HP-88	0.25	60	0.20	112-8867-INT

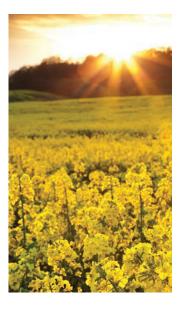
### Agilent J&W WAX-Polyethylene Glycol (PEG) Intuvo GC Columns

Agilent offers a range of WAX Intuvo GC columns, based on the polyethylene glycol polymer. Strict control of the cross-linking and deactivation processes results in various unique phase characteristics to meet your analysis needs. Agilent's J&W WAX-PEG Intuvo GC columns can be used in many different application areas, such as petrochemical, food, flavor and fragrance, solvents, and pharmaceuticals.

			/ >	
Phase	id (mm)	Length (m)	Film (µm)	Part No.
DB-WAX Ultra Inert	0.25	30	0.25	122-7032UI-INT
	0.25	30	0.50	122-7033UI-INT
	0.25	60	0.25	122-7062UI-INT
	0.32	30	0.25	123-7032UI-INT
	0.32	30	0.50	123-7033UI-INT
	0.32	60	0.50	123-7063UI-INT
HP-INNOWax	0.25	30	0.25	19091N-133-INT
	0.32	30	0.25	19091N-113-INT
	0.32	30	0.50	19091N-213-INT
	0.32	60	0.50	19091N-216-INT
DB-WAXetr	0.25	30	0.25	122-7332-INT
DB-FFAP	0.25	30	0.25	122-3232-INT
	0.32	30	1.00	123-3234-INT

#### Agilent J&W Intuvo GC Environmental Specialty Columns

Agilent offers various Intuvo GC columns for the increasingly demanding analysis of environmental contaminants including pesticides, polycyclic aromatic hydrocarbons (PAH), as well as volatile and semivolatile compounds.



Phase	id (mm)	Length (m)	Film (µm)	Part No.
DB-UI 8270D	0.18	20	0.36	121-9723-INT
Ultra Inert	0.25	30	0.25	122-9732-INT
	0.25	30	0.50	122-9736-INT
DB-EUPAH	0.18	20	0.14	121-9627-INT
DB-5ht	0.32	5	0.10	123-57J1-INT
HP-5ms Ultra Inert	0.25	5	0.25	19091S-430UI-INT
DB-CLP1	0.32	30	0.25	123-8232-INT
DB-CLP2	0.32	30	0.50	123-8336-INT
DB-1701P	0.25	30	0.25	122-7732-INT
	0.32	30	0.25	123-7732-INT
DB-624 Ultra Inert	0.18	20	1.00	121-1324UI-INT
	0.25	30	1.40	122-1334UI-INT
	0.25	60	1.40	122-1364UI-INT
	0.32	30	1.80	123-1334UI-INT
	0.32	60	1.80	123-1364UI-INT
DB-VRX	0.25	60	1.40	122-1564-INT

#### **Application Note**

Multi-Residue Pesticide Analysis with the Agilent 9000 Intuvo GC and 7000C Mass Spectrometer

Agilent publication 5991-7216EN

#### Agilent J&W Intuvo GC Forensic Specialty Columns

Forensic analyses offer chromatographers difficult challenges, including complex sample matrices, the need for low-level detection, and chemically active characteristics of many samples. In response to this, Agilent has created Ultra Inert columns that have become widely used for analyzing forensic drugs of abuse and controlled substances. Intuvo columns for reliable forensic blood alcohol analysis are also available.



Phase	id (mm)	Length (m)	Film (µm)	Part No.
DB-ALC1	0.32	30	1.80	123-9134-INT
DB-ALC2	0.32	30	1.20	123-9234-INT

For Forensic Use

#### Agilent J&W Intuvo GC Petroleum Specialty Columns

Petroleum applications vary greatly in character from detailed hydrocarbon analysis to simulated distillation. Agilent offers Intuvo GC columns designed to meet the needs of the petroleum/petrochemical chromatographer.



Phase	id (mm)	Length (m)	Film (µm)	Part No.
HP PONA	0.20	50	0.50	19091S-001-INT
DB-Sim-Dist	0.25	4	0.25	122-4002-INT

#### **Custom Intuvo Columns**

Need an Intuvo column configuration for your application that is not listed above? Custom Intuvo columns can be requested from the Agilent Custom Column Shop.

Please note: Lengths greater than 60 m, Megabore (0.53 mm id), metal columns, and PLOT phases are not available.

#### **Intuvo Guard Chip**

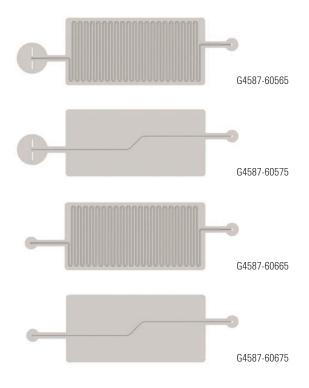
The Intuvo Guard Chip is an innovative solution that replaces guard columns and extends column lifetime. The Guard Chip is a simple disposable chip that is easily installed and replaced in minutes. These chips prevent unwanted material from depositing on, and damaging the head of the column by providing almost a meter of sample flow path just before the Intuvo GC column. This protection eliminates the need for retention time adjustment and means that you never have to trim a column again.

For applications where a Guard Chip is not needed, the jumper chip provides a short direct flow path. The guard and jumper chips are inlet-dependent so versions are available for split/splitless inlets and the multimode inlet.



#### **Guard Chips**

Description	Part No.
Guard Chip, Intuvo, split/splitless inlet	G4587-60565
Jumper Chip, Intuvo, split/splitless inlet	G4587-60575
Guard Chip, Intuvo, multimode inlet	G4587-60665
Jumper Chip, Intuvo, multimode inlet	G4587-60675





Visit us online at www.agilent.com/chem/intuvosupplies

#### **Intuvo Flow Chips**

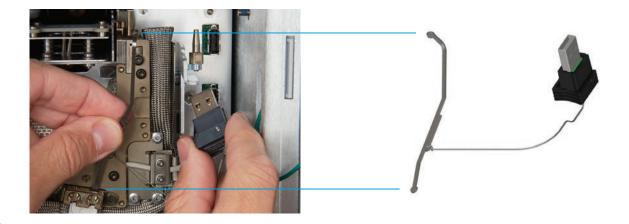
Intuvo Flow Chips are modular components that enable flexible configuration of the GC flow path. These chips provide connections between the inlet, column, and detector without the need for cumbersome ferrules. Furthermore, Intuvo Flow Chips are fitted with smart keys, so Intuvo knows exactly how to set itself up, whether for splitting, backflush, GC detectors, or mass spectrometry.

The inlet chip provides a direct connection from the Guard Chip to the column. The D1, D2, and D2-MS chips provide a connection from the column to detector 1, detector 2, or the mass spectrometer. The remaining Flow Chips combine all the complex connections for backflush and splitting into a single device.

Note that some of the Flow Chips require an Intuvo with an additional EPC module configured.

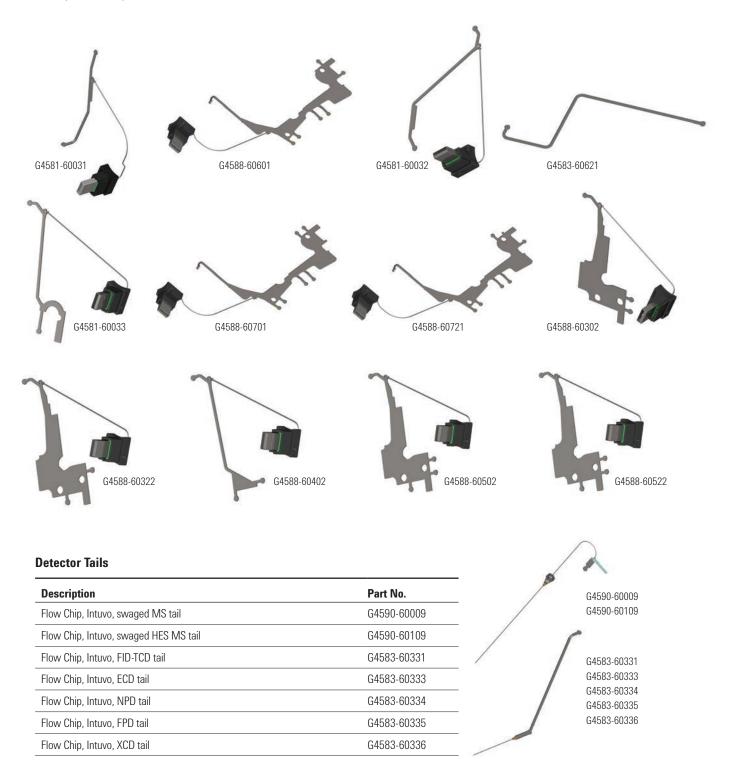
#### **Flow Chips**

Description	Purpose	Part No.
Flow Chip, Intuvo, inlet	Connects Guard Chip to column	G4581-60031
Flow Chip, Intuvo, Inlet splitter chip	Splits flow from Guard Chip to two columns	G4588-60601
Flow Chip, Intuvo, D1	Connects column to detector 1	G4581-60032
Flow Chip, Intuvo, D2	Connects column to detector 2	G4583-60621
Flow Chip, Intuvo, D2-MS	Connects column to MS	G4581-60033
Flow Chip, Intuvo, mid column backflush to D1	Connects column to detector 1, mid column backflush capability	G4588-60701
Flow Chip, Intuvo, mid column backflush to D2	Connects column to detector 2, mid column backflush capability	G4588-60721
Flow Chip, Intuvo, D1 post column backflush	Connects column to detector 1, post column backflush capability	G4588-60302
Flow Chip, Intuvo, D2-MS post column backflush	Connects column to MS detector, post column backflush capability	G4588-60322
Flow Chip, Intuvo, D1-D2 splitter chip, 1:1	Equally splits column effluent between two GC detectors	G4588-60402
Flow Chip, Intuvo, D1-MS splitter chip, 1:1	Equally splits column effluent between GC detector and MS	G4588-60502
Flow Chip, Intuvo, D1-MS splitter chip, 7:1	Splits column effluent between GC detector and MS at 7:1 ratio	G4588-60522



## **AGILENT INTUVO SUPPLIES**

The Flow Chip channel is held within a rigid housing and has an inlet and an outlet at each end. Precise microfluidic manufacturing processes mean that Intuvo Flow Chips are extraordinarily reproducible in their dimensions. Therefore, methods and results are consistent from operator-to-operator, instrument-to-instrument.



#### **Intuvo Gaskets**

Intuvo uses ferrule-free face seals for all fittings within the sample gas flow path. Gaskets take the place of ferrules throughout the GC, providing the face seal between components of the Intuvo flow path. Easily replaced, these unique leak-free connections enable confident click-and-run column changes.

The Intuvo gaskets are available in three types: polyimide, nickel, and as a plug. The polyimide gasket is for standard use up to 350 °C, while the nickel gasket provides a solution for high temperature applications up to 450 °C. The plug gasket can be used to check for leaks and for troubleshooting the flow path.

Description	Unit	Part No.	• •	• •	• •
Gasket, Intuvo, polyimide	5/pk	5190-9072	5190-9072	5190-9073	5190-9074
Gasket, Intuvo, nickel	2/pk	5190-9073			
Gasket plug, Intuvo, polyimide	2/pk	5190-9074	5190-9072	5190-9073	5190-9074

Intuvo gaskets are intended for one-time use



#### **Agilent Ultra Inert Liners**

#### Agilent Ultra Inert Liners Ensure a Complete Inert Flow Path

Agilent Ultra Inert liners provide a reproducible and reliable inert flow path, liner after liner. Agilent Ultra Inert liners are rigorously tested and certified to ensure exceptional batch-to-batch uniformity, low bleed, and superior coverage, even with highly active compounds. What's more, these Ultra Inert liners are delivered in Agilent's exclusive touchless packaging with a precleaned, conditioned, and nonstick plasma treated 0-ring pre-installed. These liners are the perfect companion to Agilent J&W Ultra Inert Intuvo GC columns.

Agilent Ultra Inert GC Inlet liners are available in split and splitless, with and without wool, and are recommended for use with your Agilent Intuvo GC for trace level analysis of samples, especially samples with active compounds.

Description	Wool	Volume (µL)	id (mm)	1/pk	5/pk	25/pk	100/pk*
Split Liners							
Liner, Ultra Inert, split, straight	Yes	990	4	5190-2294	5190-3164	5190-3168	5190-3172
Liner, Ultra Inert, universal, low pressure drop	Yes	870	4	5190-2295	5190-3165	5190-3169	5190-3173
Splitless Liners							
Liner, Ultra Inert, splitless, single taper	No	900	4	5190-2292	5190-3162	5190-3166	5190-3170
Liner, Ultra Inert, splitless, single taper	Yes	900	4	5190-2293	5190-3163	5190-3167	5190-3171
Liner, Ultra Inert, 2 mm, dimpled, splitless	No	200	2	5190-2297	5190-4006		
Liner, Ultra Inert, splitless, double taper	No	800	4	5190-3983	5190-4007		
Liner, Ultra Inert, straight	No	250	2	5190-6168			
Liner, Ultra Inert, straight	No	60	1	5190-4047			
Liner, Ultra Inert, straight, for SPME	No	35	0.75	5190-4048	5190-4056	5190-7045	
Liner, 2 mm, dimpled deactivated			2	5190-2296			
*The 100/pk is not available in touchless packaging. O-rings	must be purcha	ised separately,	5190-2269.				

#### Remove the risk of contamination with touchless packaging

Ultra Inert Inlet liners are delivered in exclusive Agilent touchless packaging so you can quickly and easily install the new, clean liner.

View a demonstration of the touchless packaging at www.agilent.com/chem/touchless



#### **Agilent Ultra Inert Direct Connect Liners**

Agilent's Ultra Inert Direct Connect liners provide maximum recovery and minimal decomposition of active compounds for methods requiring splitless injection, such as EPA 8270. They are best used with relatively clean samples containing active analytes, such as water extracts. The liners directly connect with the column to aid complete transfer of sample onto the column, eliminating the problem of inlet discrimination and further increasing sensitivity.

Description	Wool	id(mm)	Unit	Part No.
Liner, Ultra Inert, direct connect, dual taper	No	4	5/pk	5190-7011
Liner, Ultra Inert, direct connect, top hole	Yes	4	5/pk	5190-7012
Liner, Ultra Inert, direct connect, no hole	No	4	5/pk	5190-7013
Liner, Ultra Inert, direct connect, no hole	Yes	4	5/pk	5190-7014
Liner, Ultra Inert, direct connect, bottom hole	Yes	4	5/pk	5190-7020

#### Nonstick Low-Bleed and Temperature Optimized (BTO) Septa

Agilent premium nonstick BTO inlet septa provide a reliable noncontaminating seal. With a maximum injection port temperature of 400 °C, they are functional over an extended temperature range. Even at these high temperatures, plasma treatment eliminates sticking in the injection port. These septa are ideal for use with Agilent J&W low-bleed Intuvo GC/MS columns as they generate the lowest bleed. Agilent BTO inlet septa are supplied in a trifold blister pack ensuring that each septum remains clean and ready to use.

Description	Unit	Part No.
Septa, nonstick BTO inlet, 11 mm	50/pk	5183-4757
Septa, nonstick BTO inlet, 11 mm	100/pk	5183-4757-100



#### **ADM Flow Meter**

ADM Flow Meters provide peace of mind for your GC analyses. These flow meters deliver an external reference for verifying gas flows and are a valuable tool for troubleshooting detector problems. ADM Flow Meters are ideal for measuring gas streams with a changing gas composition. This is because ADM Flow Meters measure gas volumetrically, eliminating the need to select a gas type. The ADM Flow Meter is also easy to maintain, due to its removable calibration cartridge. Instead of returning the meter to a third party, you simply replace the cartridge once a year to keep the meter compliant.

- Range: 0.5-750 mL/min
- Accuracy: ±2% of reading or 0.2 mL/min, whichever is greater
- Data Port: USB
- Recalibration: Customer replicable calibration cartridge
- Automatic notification of cartridge replacement

- · New composite materials
- Universal 3AA or USB power
- · USB connects to web interface for added functionality
- Easy to view OLED screen
- · Web interface for updates and monitoring



Description	Part No.
ADM Flow Meter	G6691A
Replacement cartridge, for ADM Flow Meter	G6692A



#### **Gas Clean Filter**

The Agilent Gas Clean filter system provides enhanced gas quality to your Intuvo GC system for maximum productivity. Clean gases reduce the risk of column damage, sensitivity loss, and instrument downtime. Inserting a Gas Clean filter system in the gas line immediately before the instrument inlet greatly reduces the level of impurities entering the system, thus improving trace analysis.

Replacing the filters when they have reached absorption capacity ensures maximum protection of your Intuvo GC columns and analytical hardware. The sensitive indicators change color, alerting you that the filter needs replacing.

Intuvo has an improved enclosure for the GC split vent trap, which makes replacement easier. Split vent traps capture contaminants released by split injection systems. The split vent cartridge should therefore be replaced every six months to prevent unstable flows, split vent valve damage, sample carryover, and increased odors in the lab.



Gas Clean filter kit, CP17995



Split vent trap, single cartridge, 5188-6495

#### **Gas Leak Detector**

Gas leaks cause detector noise and baseline instability, shorten column life and waste expensive carrier gas. Agilent's G3388B Electronic Gas Leak Detector is an easy way to quickly identify leaks in your system and prevent system downtime.

Description	Part No.
Gas Clean filter kit, Intuvo, includes bracket, connecting unit, and filter	CP17995
Replacement Gas Clean filter, carrier gas	CP17973
Split vent trap, single cartridge	5188-6495
Split vent trap, 2/pk	G1544-80530

#### **Intuvo Installation Kit**

Contains all the equipment needed to install your Intuvo GC system.

- Fittings, 0.125 inch, brass, 20/pk
- Leak detector, 8 oz
- Tee, 0.125 inch brass union, 4/pk
- 0.125 x 0.065 inch copper tubing, 50 foot coil
- Ball valve, 0.125 inch, 2/pk

Description	Part No.
Intuvo installation kit	19199U

- · Intuvo tool kit with:
- Tool bag
- Tool, wrench 0.25 to 0.3125 inch
- Cutter, tube
- Torx screwdriver, T20 size
- Torx screwdriver, T10 Size
- Magnifying lens
- Septum tool, knurled handle
- Tweezers, 4.75 inch long
- Needle nose pliers, pointed serrated jaws

## **AGILENT INTUVO SUPPLIES**

Part No.

Part No. G4583-20005

G4581-60260

G4581-20006

G4582-20085 G4586-20027

G4591-20320



G4591-20320



	Compression bolt, detector tail
G4581-20006	Compression bolt, Intuvo
	Compression bolt, Guard Chip
	Compression bolt, split/splitless inlet
	Compression bolt, multimode inlet

G4582-20085

G4580-68300

Description	Part No.
Wrench, open end, 0.3125 inch	8710-2801
Wrench, open end, 0.25 inch	8710-2800
Torque driver kit, includes G4581-20522 and 8710-2790	5190-9571
Torque driver extension*	G4581-20522
Screw driver, torque, preset adjustable*	8710-2790

ided in 5190-957

**Unique Detector Parts** 

Description

Description

**Tools** 

FID Jet 0.11 inch id

**Compression Bolts** 



#### **Exhaust Vent**

Description	Part No.
Exhaust vent	G4580-68300

Visit us online at www.agilent.com/chem/intuvosupplies

## FOCUS ON WHAT YOU DO BEST

For over 40 years, Agilent has been building and maintaining the instruments you count on to stay competitive and successful. Trust Agilent to protect your investment with a broad portfolio of services, backed by a global network of experienced service professionals dedicated to the productivity of your lab.



#### **Get the Agilent Service Guarantee**

Should your instrument require service while covered by an Agilent service agreement, we guarantee repair or we will replace your instrument for free.

No other company offers this level of commitment to keep your lab up and running at peak efficiency.

#### **Agilent Advantage Service Plans**

#### The best service available for your Agilent instruments

Agilent offers a flexible range of service plans so that you can choose the level of coverage that is best for your lab.

- Agilent Advantage Gold: Priority coverage for ultimate uptime and productivity
- Agilent Advantage Silver: Comprehensive coverage for dependable laboratory operations
- Agilent Advantage Bronze: Total repair coverage at a fixed annual price
- · Agilent Repair Service: Basic coverage for reliable instrument repair

Agilent Advantage service plans include Agilent remote advisor for real-time remote monitoring and diagnostics. Through secure internet connections, you can interact with Agilent service professionals, receive detailed asset reports, and configure text or email alerts to notify you before problems occur—helping you to maximize instrument uptime and optimize laboratory workflows.

#### **Agilent Compliance Services**

#### Equipment qualification that meets the most stringent requirements

Laboratory decision makers and users ranked Agilent as their first choice for general laboratory compliance services.

Agilent Enterprise Edition compliance was developed to streamline compliance across your entire lab. Used globally in regulated labs, including standards organizations and regulatory agencies, Enterprise Edition enables you to:

- Improve qualification efficiency by automating protocols across platforms to ensure greater efficiency and minimize regulatory risk
- Standardize your entire compliance operation with robust test designs that work with all your instruments
- · Add, remove, or reconfigure tests based on your unique user requirements
- Significantly reduce staff review time with consistently formatted, computer generated, tamper-proof reports



Laboratory decision makers and users ranked Agilent as their first choice for general laboratory compliance services.

### **AGILENT SERVICE AND SUPPORT**

#### **Agilent Education and Consulting Services**

#### Our best minds, working for you

Make the most of your instrument with training and consulting from the same experts who designed the instruments, software, and processes you use every day.

- Classroom and on-site training in instrument operation, troubleshooting, and maintenance
- · Customized consulting services to meet your lab's unique needs

#### The Agilent Value Promise—10 years of guaranteed value

In addition to continually evolving products, we offer something else unique to the industry —our 10 year value guarantee. The Agilent Value Promise guarantees you at least 10 years of instrument use from your date of purchase, or we will credit you with the residual value of the system toward an upgraded model. Not only does Agilent ensure a reliable purchase now, but we also ensure that your investment is just as valuable in the future.

For more detailed information, go to: www.agilent.com/chem/services or contact your local Agilent representative

#### **Technical Support at work for you**

Have a hardware, software, application, instrument repair, or troubleshooting question? Agilent's technical experts are available to answer your questions. With years of laboratory experience, our technical support specialists can provide in-depth knowledge and experience.

For questions pertaining to supplies found in this catalog, contact your local Agilent office or Agilent authorized distributor, or visit **www.agilent.com/chem/techsupport** 

#### **Need more information?**

#### Visit www.agilent.com/chem/contactus

- · Locate your nearest Agilent office or distributor for expert technical support.
- Get fast sales and product assistance by phone. Simply use the scroll-down menu to select your country.
- · Receive email assistance using our convenient online forms.

#### Learn more:

www.agilent.com/chem/intuvo www.agilent.com/chem/intuvocolumns www.agilent.com/chem/intuvosupplies

Buy online: www.agilent.com/chem/store

U.S. and Canada 1-800-227-9770 agilent\_inquiries@agilent.com

Europe info\_agilent@agilent.com

Asia Pacific inquiry\_lsca@agilent.com

This information is subject to change without notice. © Agilent Technologies, Inc. 2016 Published in the USA, August 29, 2016 5991-7292EN

