



ATLAS

Chromatography Supplies & Instruments Catalog

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Questions:

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About Atlas

ATLAS is an independent analytical instrument service provider with over 20 years experience in the sector. Established in 2013 to give an alternative solution to the instrument manufactures. ATLAS provides a range of service solutions to enable your laboratory to minimise downtime and maximise the value of your investments.

As well as providing technical support, we have expertise in implementing analytical methodology. With over 10 years experience in the analysis of pesticides, dioxins, PCBs, PAHs and volatile compounds we can get your method up and running quickly without any hassle.

Our broad range of chromatography supplies for gas chromatography (GC) and High Performance Liquid Chromatography (HPLC) are manufactured to the highest quality, continuing the tradition of high standards you have come to expect from us.

With our complete range of service solutions and chromatography supplies we are able to offer you a truly global solution to all your service demands.

ATLAS è un'azienda indipendente con oltre 20 anni di esperienza nel campo scientifico acquisita per mezzo di collaborazioni con le più grandi compagnie multi nazionali.

L'azienda è specializzata da 10 anni in analisi di residui di pesticidi, diossine, PCB e IPA ed è specialista in prodotti per GC/MS.

La nostra azienda offre alla nostra clientela multi-vendor service solutions a costi flessibili e ragionevoli come alternativa ai costi delle aziende costruttrici.

ATLAS offre tutta l'assistenza necessaria per aumentare le performances analitiche delle vostre strumentazioni per l'ottenimento di condizioni di analisi ottimali. Ottime condizioni strumentali, nonché metodi analitici ottimizzati e creati appositamente per le vostre esigenze porteranno benefici al vostro laboratorio in termini di costi e di guadagno.

L'azienda fornisce training sull'uso della vostra strumentazione e le procedure di manutenzioni di base al fine di garantire il massimo dal vostro investimento.

Inoltre, con la nostra gamma di prodotti di consumo per i vostri strumenti, che vi aiuteranno a garantire la massima produttività del vostro strumento.

ATLAS è una nuova azienda con molti anni di esperienza alle spalle. Contattaci per scoprire come possiamo aiutarvi

GC Injector Liners

- ♦ Bruker
- ♦ Varian
- ♦ Agilent (HP)
- ♦ Perkin Elmer
- ♦ Finnigan

Deactivated Split/Splitless Injector Liners

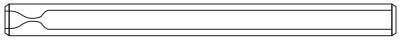
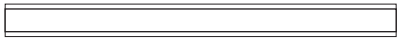
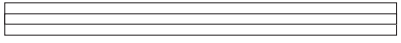
We offer a full line of Split/Splitless and SPI Injector Liners that allow flexibility in analyzing different sample types. A regular schedule of inlet liner replacement will help prevent adsorption problems that can otherwise drastically affect your analysis. All liners are deactivated to meet high performance standards. Each liner is wrapped in ultra clean foil to assure cleanliness from our manufacturing to your laboratory, this is an industry exclusive.

Varian/Bruker GC Deactivated Inlet Liners

CP-1177 Split/Splitless Glass Liners

- Made with a Consistent, High Quality Proprietary Deactivation Process
- Ultra Clean Foil Wrapped Liners- An Industry Exclusive
- Packaged in Ultra Clean, White Non-Plastic Fluted Trays
- Consistent dimensions, tolerances and quality



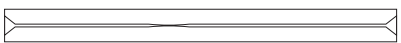
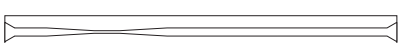
	Description	Qty	Part#	Price \$
	Gooseneck Split/Splitless 4mm w/ deactivated glass wool	5/pk 25/pk	392611936 392611936-25	OEM
	4mm Split w/ deactivated glass wool	5/pk 25/pk	392611937 392611937-25	OEM
	2mm Splitless w/ deactivated glass wool	5/pk 25/pk	392611938 392611938-25	OEM
	Gooseneck Split/Splitless 4mm	5/pk 25/pk	392611927 392611927-25	OEM
	4mm Split/Splitless	5/pk 25/pk	392611925 392611925-25	OEM
	2mm Splitless	5/pk 25/pk	392611924 392611924-25	OEM
	Graphite O-Rings, 6.5mm ID to fit CP-1177 injector glass liners	5/pk 25/pk	392611940-5 392611940-25	OEM

Varian/Bruker GC Deactivated Inlet Liners

1093/1094 SPI Glass Liners

- Consistent dimensions, tolerances and quality
- Each Liner is deactivated to assure a clean, inert glass surface
- Packaged in Ultra Clean, White Non-Plastic Fluted Trays
- Ultra Clean Foil Wrapped Liners- An Industry Exclusive



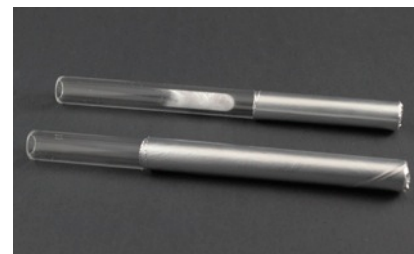
	Description	Old Varian Liner #	Qty	Part#	Price \$
	High linearity for 0.25 mm and 0.32 mm ID columns	03-918332-01	5/pk 25/pk	190010906 190010906-25	OEM
	High linearity for 0.53 mm ID columns	03-918332-02	5/pk 25/pk	190010907 190010907-25	OEM
	Packed deactivated glass wool (0.8 mm ID) Injection Volumes	03-918332-03	5/pk 25/pk	392611950 392611950-25	OEM
	With buffer, injection volumes >1 µL	01-900109-08	5/pk 25/pk	190010908 190010908-25	OEM

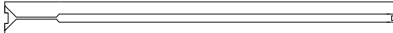
GC Injector Liners

Varian/Bruker GC Deactivated Inlet Liners

1075/1077 Split/Splitless Glass Liners

- Clean, Non-adsorptive/Non-reactive Surface
- Glass Wool is Deactivated With Our Proprietary Deactivation Process
- Packaged in Ultra Clean, White Non-Plastic Fluted Trays
- Ultra Clean Foil Wrapped Liners- An Industry Exclusive



	Description	Old Varian Liner #	Qty	Part#	Price \$
	Splitless	03-949437-90	5/pk 25/pk	190010905 190010905-25	OEM
	Split w/ deactivated FS Wool	01-900109-01	5/pk 25/pk	190010901 190010901-25	OEM
	Laminar Cap Splitter	01-900109-02	5/pk 25/pk	190010902 190010902-25	OEM
	Frit Splitter	16-000830-01	5/pk 25/pk	190010903 190010903-25	OEM
	Baffle Splitter	16-000829-00	5/pk 25/pk	190010904 190010904-25	OEM
	Split, packed with 10% OV-101 On Chromosorb W-HP	03-949809-00	5/pk 25/pk	392611941 392611941-25	OEM
	Split, unpacked	16-000830-00	5/pk 25/pk	392611942 392611942-25	OEM
	Graphite Ferrule 1/4" to fit 1075/1077 Split/Splitless Liners		5/pk 25/pk	392611763-5 392611763-25	OEM

Varian/Bruker GC Deactivated Inlet Liners

1060/1061 Split/Splitless Glass Liners

- Packaged in Ultra Clean, White Non-Plastic Fluted Trays
- Glass Wool is Deactivated With Our Proprietary Deactivation Process
- Ultra Clean Foil Wrapped Liners- An Industry Exclusive
- Made with a Consistent, High Quality Proprietary Deactivation Process



	Description	Old Varian Liner #	Qty	Part#	Price \$
	Glass Flash, Megabore 0.53 mm ID columns universal flash	03-918339-00	5/pk 25/pk	392611943 392611943-25	OEM
	Heated Flash Vaporization injector w/ deactivated glass wool	37-000813-00	5/pk 25/pk	392611944 392611944-25	OEM

GC Injector Liners

Varian/Bruker GC Deactivated Inlet Liners

1078/1079 Split/Splitless Glass Liners

- Enhanced Analytical Precision for Higher Molecular Weight Components
- Ultra Clean Foil Wrapped Liners- An Industry Exclusive
- Consistent Dimensions, Tolerances and Quality
- Proven Silanization Technique, to Ensure Inertness
- Packaged in Ultra Clean, White Non-Plastic Fluted Trays



	Description	Old Varian Liner #	Qty	Part#	Price \$
	Split, open, 3.4 mm ID	03-918464-00	5/pk 25/pk	392611945 392611945-25	OEM
	Split, frit, 3.4 mm ID	03-918464-01	5/pk 25/pk	392611946 392611946-25	OEM
	Splitless, open, 2 mm ID	03-918466-00	5/pk 25/pk	392611947 392611947-25	OEM
	Split, packed with 10% OV-101 on Chromosorb W-HP 80/100	03-918956-00	5/pk 25/pk	392611954 392611954-25	OEM
	SPME, 0.8 mm ID	03-925330-00	5/pk 25/pk	392611948 392611948-25	OEM
	Splitless, open, 0.5 mm ID	03-925331-00	5/pk 25/pk	392611949 392611949-25	OEM
	Split/splitless, w/ deactivated glass wool, 2 mm ID	03-925350-00	5/pk 25/pk	392611953 392611953-25	OEM
	High linearity for 0.25 mm and 0.32 mm ID columns	03-918332-01	5/pk 25/pk	190010906 190010906-25	OEM
	High linearity for 0.53 mm ID columns	03-918332-02	5/pk 25/pk	190010907 190010907-25	OEM
	Capillary Nut for Varian 1078 Injector, Brass Column Scale Nut		5/pk 25/pk	392611911-5 392611911-25	OEM
	Capillary Nut for Varian 1078 Injector, Brass Column Scale Nut		5/pk 25/pk	392611910-5 392611910-25	OEM
	Graphite Ferrules, 5 mm ID to fit 1078 Split/Splitless Injector Liners		5/pk 25/pk	392611919-5 392611919-25	OEM

Varian/Bruker GC Deactivated Inlet Liners

1095/1096/1097/1098 Temperature Programmable Injector Liners (on-column)

- Ultra Clean Foil Wrapped Liners- An Industry Exclusive
- Made with a Consistent, High Quality Proprietary Deactivation Process
- In-house manufacturing that meets/exceeds instrument manufacturer's specs
- Packaged in Ultra Clean, White Non-Plastic Fluted Trays



	Description	Old Varian Liner #	Qty	Part#	Price \$
	Glass Column Guide (3400/3500/3600)	03-917310-00	5/pk 25/pk	392611951 392611951-25	OEM
	Glass Column Guide (3700/6000)	03-908701-00	5/pk 25/pk	392611952 392611952-25	OEM

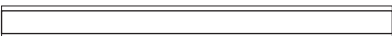
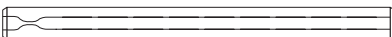
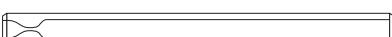
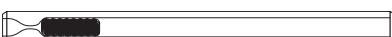
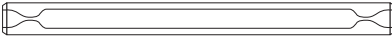
GC Injector Liners

Agilent (HP) GC Deactivated Inlet Liners

Split/Splitless Liners for HP/Finnigan GCs Models 4890, 5880, 5890, 6850, 6890, Finnigan 9001 GCQ

- In-house manufacturing that meets/exceeds instrument manufacturer's specs
- Each Liner is deactivated to assure a clean, inert glass surface
- Ultra Clean Foil Wrapped Liners- An Industry Exclusive
- Packaged in Ultra Clean, White Non-Plastic Fluted Trays
- Made with a Consistent, High Quality Proprietary Deactivation Process



	Description	Similar to HP Liner #	Qty	Part#	Price \$
	2 mm Splitless, 6.5 OD x 78.5 L x 2 mm ID	18740-80220 5181-8818	5/pk 25/pk	392611924 392611924-25	OEM
	4 mm Splitless, 6.5 OD x 78.5 L x 4 mm ID	18740-80220 5181-8818/4mm	5/pk 25/pk	392611925 392611925-25	OEM
	2 mm Gooseneck Split/Splitless, 6.5 OD x 78.5 L x 2 mm ID	5181-3316 modified/2mm	5/pk 25/pk	392611926 392611926-25	OEM
	4 mm Gooseneck Splitless, 6.5 OD x 78.5 L x 4 mm ID	5181-3316	5/pk 25/pk	392611927 392611927-25	OEM
	4 mm Gooseneck Splitless Packed w/ deactivated FS wool, 6.5 OD x 78.5 L x 4 mm ID	5062-3587	5/pk 25/pk	392611928 392611928-25	OEM
	4 mm Double Gooseneck Splitless, 6.5 OD x 78.5 L x 4 mm ID	5181-3315	5/pk 25/pk	392611929 392611929-25	OEM
	Cup unpacked, 6.3 OD x 78.5 L x 4 mm ID	18740-80190	5/pk 25/pk	392611931 392611931-25	OEM
	Cup, packed w/ deactivated FS wool, 6.3 OD x 78.5 L x 4 mm ID	18740-80190 modified	5/pk 25/pk	392611932 392611932-25	OEM
	Cup, packed w/10% OV-1 On Chromosorb-W HP, 6.3 OD x 78.5 L x 4 mm ID	18740-60840	5/pk 25/pk	392611933 392611933-25	OEM
	Split 4mm Packed w/ deactivated FS wool, 6.3 OD x 78.5 L x 4 mm ID	19251-60540	5/pk 25/pk	392611934 392611934-25	OEM
	4 mm Gooseneck Split/Splitless w/ deactivated glass wool		5/pk 25/pk	392611936 392611936-25	OEM
	4 mm Split w/ deactivated glass wool		5/pk 25/pk	392611937 392611937-25	OEM
	2 mm Splitless w/ deactivated glass wool		5/pk 25/pk	392611938 392611938-25	OEM
	Graphite O-Rings, 6.5 mm ID to fit HP splitless 6.5 mm OD liners		10/pk 100/pk	392611930 392611930-100	OEM
	Graphite O-Rings, 6.3 mm ID to fit HP split 6.3 mm OD liners	5180-4168	10/pk 100/pk	392611935 392611935-100	OEM

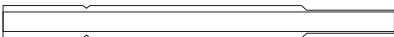
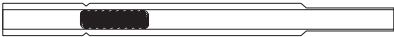
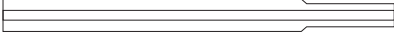
GC Injector Liners

Perkin Elmer GC Deactivated Inlet Liners

Split/Splitless Glass Liners

- Each Liner is deactivated to assure a clean, inert glass surface
- Consistent dimensions, tolerances and quality
- Packaged in Ultra Clean, White Non-Plastic Fluted Trays
- Glass Wool is Deactivated With Our Proprietary Deactivation Process
- Ultra Clean Foil Wrapped Liners- An Industry Exclusive



	Description	Similar to HP Liner #	Qty	Part#	Price \$
	4 mm Split Autosystem, 4 ID x 92 L x 6.2 mm OD	N610-1052	5/pk 25/pk	392611921 392611921-25	OEM
	4 mm Split Autosystem, Packed w/ deactivated Glass Wool, 4 ID x 92 L x 6.2 mm OD	N610-1052 modified	5/pk 25/pk	392611922 392611922-25	OEM
	2 mm Splitless Autosystem, 4 ID x 92 L x 6.2mm OD	N610-1372	5/pk 25/pk	392611923 392611923-25	OEM

Jacketed Graphite Ferrules & Capillary Nuts

- Graphite Ferrules for Capillary Columns, jacketed in brass
- Capillary Nut to Fit Jacketed Ferrules
- Stable to 450°C
- Does not stick to Glass or Fused Silica
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Jacketed Ferrules for Varian 1078 Inj., Brass Jacket, 0.4mm Graphite Ferrule	10/pk 50/pk	392611912 392611912-50	OEM
Jacketed Ferrules for Varian 1078 Inj., Brass Jacket, 0.5mm Graphite Ferrule	10/pk 50/pk	392611913 392611913-50	OEM
Jacketed Ferrules for Varian 1078 Inj., Brass Jacket, 0.8mm Graphite Ferrule	10/pk 50/pk	392611755 392611755-50	OEM
Capillary Nut for Varian 1078 Injector, Brass Column Scale Nut	1/pk 10/pk	392611910 392611911	OEM

Special Graphite Ferrule for Varian Liners, 450°C

- For Varian Split/Splitless 1075/1077/1078 Liners
- Stable to 450°C
- High Density Graphite
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Special 1/4" Graphite Ferrule for Varian Split/Splitless 1075/1077 Liner 394936200	10/pk 50/pk	392611763 392611763-50	OEM
Special 5mm Graphite Ferrule for Varian Split/Splitless 1078 Inj. Liners 392534200	10/pk 50/pk	392611919 392611919-50	OEM

GC Injector Liners

Ultra Clean Graphite Ferrule, 450°C

- Temperature Programmed Conditioning at 400°C
- Fifty Programmed Ramp Ups in GC oven
- Stable to 450°C
- High Density Graphite
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Packaged in "Ultra Clean" Glass Bottles with Special Yellow "Keep Clean" Label



Description	Qty	Part#	Price \$
Ultra Clean 5mm Preconditioned Graphite Ferrules for Varian, Bruker & Agilent Chromatographs	2/pk 10/pk	392534202 392534201	OEM

Graphite O-Rings

- For Agilent and Varian 1177 Injectors
- Excellent thermal stability at injection port temperatures up to 450°C



Description	Qty	Part#	Price \$
Graphite O-Rings, 6.3mm ID, to fit HP Split 6.3mm OD liners	10/pk 50/pk	392611935 392611935-50	OEM
Graphite O-Rings, 6.5mm ID, Same as HP 5180-4173	10/pk 50/pk	392611930 392611930-50	OEM
Viton O-Rings 250°C One Size Fits Split/ 6.3mm & Splitless/ 6.5mm OD Liners	10/pk 50/pk	392611764 392611764-50	OEM
Graphite O-Rings, 6.5mm I.D. to Fit 1177 Injector, Glass Liners	10/pk 50/pk	392611940 392611940-50	OEM
Graphite O-Rings for Varian and Hp Liners, 450°C, 6.3mm I.D. for Split Liners	10/pk 50/pk	392611761 392611761-50	OEM
Graphite O-Rings for Varian and HP Liners, 6.5mm I.D. for Splitless Liners	10/pk 50/pk	392611762 392611762-50	OEM
Graphite O-Rings for Varian 1177 and HP Liners, 6.5mm I.D.	10/pk 50/pk	392611918 392611918-50	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

GC Septa

- ♦ Agilent (HP)
- ♦ Varian
- ♦ Bruker
- ♦ Perkin Elmer
- ♦ Antek
- ♦ Finnigan (TMQ)
- ♦ Gow Mac
- ♦ HNU
- ♦ Shimadzu
- ♦ SRI
- ♦ Thermo Scientific
- ♦ Tracor

Septa Reference Chart

Varian/Bruker

Instrument	Septum Diameter (mm)
Packed Column	9.5/10
1177	9
1075/1077/1078/1079/1093/1094 SPI	11.5
1040/1041/1060/1061	9.5
3700 Vista	11
Capillary Injectors	11
Saturn GC/MS	11/11.5

Agilent (HP)

Instrument	Septum Diameter (mm)
HP5750 & Earlier	12.5
5880A, 5890, 6850, 6890, 7890, PTV, Purged Pack Column	11
5700, 5880, 5890, 6890, 6900	9.5
On-Column Injection, Capillary	5

Perkin Elmer

Instrument	Septum Diameter (mm)
Sigma Series	11
900,990	11
8000 Series	11
Auto SYS	11
Auto SYS XL, Clarus 500	11

Shimadzu

Instrument	Septum Diameter (mm)
All Models (14, 15A, 16, 17A)	Plug

Tracor

Instrument	Septum Diameter (mm)
550, 560	9.5
220, 222, 540	12.5

Septa Reference Chart

Finnigan (TMQ)

Instrument	Septum Diameter (mm)
GC 9001, 9600	9.5
GCQ	9.5
QCQ	9.5
TRACE 2000	9.5
9000/9500	12.5

Thermo Scientific

Instrument	Septum Diameter (mm)
TRACE GC/ Focus Split/ Splitless	17
GCQ w/TRACE, PTV	17
8000 Series	17
GCQ, 9100	9.5

Gow Mac

Instrument	Septum Diameter (mm)
All Models	9.5

HNU

Instrument	Septum Diameter (mm)
Portable GC	9.5

Antek

Instrument	Septum Diameter (mm)
All Models	9.5

SRI

Instrument	Septum Diameter (mm)
All Models	Plug

Premium High Temp/Low Bleed Septa, 400°C Max

- Injector Temperature 400°C
- Conditioned For High Sensitivity Analysis
- Lowest Bleed When Tested Against The Competition
- Long Injector Life, 170 + Injections
- Carefully chosen to meet the varied requirements of gas chromatographic analyses
- Packaged in Wide Mouth Glass Bottles



Description	Qty	Part#	Price \$
Premium High Temp/Low Bleed Septa 5 mm (3/16 in.)	50/Pk	39261 1679	OEM
	100/Pk	39261 1680	
Premium High Temp/Low Bleed Septa 9 mm (11/32 in.)	50/Pk	39261 1681	OEM
	100/Pk	39261 1682	
Premium High Temp/Low Bleed Septa 9.5 mm (3/8 in.)	50/Pk	39261 1683	OEM
	100/Pk	39261 1684	
Premium High Temp/Low Bleed Septa 11 mm (7/16 in.)	50/Pk	39261 1685	OEM
	100/Pk	39261 1686	
Premium High Temp/Low Bleed Septa 11.5 mm (11/24 in.)	50/Pk	39261 1687	OEM
	100/Pk	39261 1688	
Premium High Temp/Low Bleed Septa 12.5 mm (1/2 in.)	50/Pk	39261 1689	OEM
	100/Pk	39261 1690	
Premium High Temp/Low Bleed Septa 17 mm (21/32 in.)	50/Pk	39261 1691	OEM
	100/Pk	39261 1692	
Premium High Temp/Low Bleed Septa Shimadzu Plug	50/Pk	39261 1693	OEM
	100/Pk	39261 1694	

Premium Medium Temperature Septa, 300°C Max

- Heat Stable To 300° C
- Unique Conditioning Process
- Long Injection Life, 125+ Injections
- Low Bleed
- Offer overall dependability in the under 300° C temperature range
- Packaged In Wide Mouth Glass Bottles



Description	Qty	Part#	Price \$
Premium medium temperature septa, 5 mm (3/16 in.)	50/Pk	39261 1695	OEM
	100/Pk	39261 1696	
Premium medium temperature septa, 9 mm (11/32 in.)	50/Pk	39261 1697	OEM
	100/Pk	39261 1698	
Premium medium temperature septa, 9.5 mm (3/8 in.)	50/Pk	39261 1699	OEM
	100/Pk	39261 1701	
Premium medium temperature septa, 11 mm (7/16 in.)	50/Pk	39261 1702	OEM
	100/Pk	39261 1703	
Premium medium temperature septa, 11.5 mm (11/24 in.)	50/Pk	39261 1704	OEM
	100/Pk	39261 1705	
Premium medium temperature septa, 12.5 mm (1/2 in.)	50/Pk	39261 1706	OEM
	100/Pk	39261 1707	
Premium medium temperature septa, 17.0 mm (21/32 in.)	50/Pk	39261 1708	OEM
	100/Pk	39261 1709	
Premium medium temperature septa, Shimadzu Plug	50/Pk	39261 1710	OEM
	100/Pk	39261 1711	

Premium General Purpose Septa, 250°C Max

- Heat Stable To 250°C
- Isothermal Use, Easy To penetrate
- Long Injection Life, 150+ Injections
- Low cost silicone rubber, designed for low temperature
- Long injector life applications
- Packaged In Wide Mouth Glass Bottles



Description	Qty	Part#	Price \$
Premium General Purpose septa, 5 mm (3/16 in.)	50/Pk	392611712	OEM
	100/Pk	392611713	
Premium General Purpose septa, 9 mm (11/32 in.)	50/Pk	392611714	OEM
	100/Pk	392611715	
Premium General Purpose septa, 9.5 mm (3/8 in.)	50/Pk	392611716	OEM
	100/Pk	392611717	
Premium General Purpose septa, 11 mm (7/16 in.)	50/Pk	392611718	OEM
	100/Pk	392611719	
Premium General Purpose septa, 11.5 mm (11/24 in.)	50/Pk	392611720	OEM
	100/Pk	392611721	
Premium General Purpose septa, 12.5 mm (1/2 in.)	50/Pk	392611722	OEM
	100/Pk	392611723	
Premium General Purpose septa, 17.0 mm (21/32 in.)	50/Pk	392611724	OEM
	100/Pk	392611725	
Premium General Purpose septa, Shimadzu plug	50/Pk	392611726	OEM
	100/Pk	392611727	

Green High Temp/Low Bleed Septa, 350°C Max

- Heat Stable to 350°C
- Packaged In Wide Mouth Glass Bottles
- Long Injector Life



Description	Qty	Part#	Price \$
Green High Temp/Low Bleed Septa, 11 mm	50/pk	392611920	OEM
	100/pk	392611920-100	
Green High Temp/Low Bleed Septa, 9 mm	50/pk	392611736	OEM
	100/pk	392611736-100	

General Purpose Grey Septa, 250°C Max

- Heat Stable To 250°C
- Ease of Penetration
- Long Injection Life, 100+ Injections
- Isothermal Use
- Packaged In Wide Mouth Glass Bottles



Description	Qty	Part#	Price \$
General Purpose Grey Septa 9.5 mm (3/8 in.)	25/Pk	392611728	OEM
	100/Pk	392611729	
General Purpose Grey Septa 11 mm (7/16 in.)	25/Pk	392611730	OEM
	100/Pk	392611731	

Beige Low Bleed Teflon Faced Septa, 250°C Max

- Long Life & Low Bleed
- Silicone Discs With Neutral Teflon Facing
- Packaged in Wide Mouth Glass Bottles



Description	Qty	Part#	Price \$
Beige Low Bleed Standard Teflon Faced Septa 9.5 mm (3/8 in.)	25/Pk	392611737	OEM
	100/Pk	392611738	
Beige Low Bleed Standard Teflon Faced Septa 11 mm (7/16 in.)	25/Pk	392611739	OEM
	100/Pk	392611740	

High Sensitivity Teflon Faced Septa, 250°C Max

- For Low Concentration Samples
- Recommended For FID & ECD Use
- Can Withstand a Large Number of Punctures
- Packaged In Wide Mouth Glass Bottles



Description	Qty	Part#	Price \$
High Sensitivity Teflon Faced Septa 9.5 mm (3/8 in.)	25/Pk	392611732	OEM
	100/Pk	392611733	
High Sensitivity Teflon Faced Septa 11 mm (7/16 in.)	25/Pk	392611734	OEM
	100/Pk	392611735	

High Temperature Thermogreen® Septa, 350°C Max

- Recommended for use in all GC/MS Instruments
- Extremely Low Bleed Septa
- Ideal for Autosamplers



Description	Qty	Part#	Price \$
Thermogreen Septa, 9 mm	5/pk	392598902	OEM
	25/pk	392598903	
Thermogreen Septa, 11 mm (7/16 in.)	5/pk	392035701	OEM
	25/pk	392035702	

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Ultra Sensitive High Temp/Low Bleed Septa, 400°C Max

- Injector Temperature 400°C
- Conditioned For High Sensitivity Analysis, Ultra Low Bleed
- Precision Molded, Easy to Pierce
- Premium Platinum Cured Silicone
- Precise Fit, No Flared Edges
- No Ghost Peaks
- Packaged in Ultra Clean Wide Mouth Glass Bottles, Ready to Use



Description	Qty	Part#	Price \$
Ultra Sensitive High Temp/Low Bleed Septa 9.5 mm (3/8 in.)	50/Pk	40002	OEM
	100/Pk	40002-100	
Ultra Sensitive High Temp/Low Bleed Septa 10 mm	50/Pk	40031	OEM
	100/Pk	40031-100	
Ultra Sensitive High Temp/Low Bleed Septa 11 mm (7/16 in.)	50/Pk	40003	OEM
	100/Pk	40003-100	
Ultra Sensitive High Temp/Low Bleed Septa 17 mm (21/32 in.)	50/Pk	40006	OEM
	100/Pk	40006-100	

Ultra Sensitive High Temp/Low Bleed Septa, 400°C Max (w/ Guide Hole)

- Injector Temperature 400°C
- Guide Hole for Easy Needle Insertion
- Conditioned For High Sensitivity Analysis, Ultra Low Bleed
- Precision Molded, Easy to Pierce
- Premium Platinum Cured Silicone
- Precise Fit, No Flared Edges
- No Ghost Peaks
- Packaged in Ultra Clean Wide Mouth Glass Bottles, Ready to Use



Description	Qty	Part#	Price \$
Ultra Sensitive High Temp/Low Bleed Septa 9.5 mm (3/8 in.) w/ Guide Hole	50/Pk	40010	OEM
	100/Pk	40010-100	
Ultra Sensitive High Temp/Low Bleed Septa 10 mm w/ Guide Hole	50/Pk	40032	OEM
	100/Pk	40032-100	
Ultra Sensitive High Temp/Low Bleed Septa 11 mm (7/16 in.) w/ Guide Hole	50/Pk	40011	OEM
	100/Pk	40011-100	
Ultra Sensitive High Temp/Low Bleed Septa 17 mm (21/32 in.) w/ Guide Hole	50/Pk	40014	OEM
	100/Pk	40014-100	
Ultra Sensitive High Temp/Low Bleed Septa Shimadzu Plug w/ Guide Hole	50/Pk	392611693US	OEM
	100/Pk	392611694US	

Ultra Sensitive General Purpose Medium Temp/Low Bleed Septa, 325°C Max

- Injector Temperature 325°C
- Conditioned For High Sensitivity Analysis, Ultra Low Bleed
- Precision Molded, Easy to Pierce
- Premium Platinum Cured Silicone
- Precise Fit, No Flared Edges
- No Ghost Peaks
- Packaged in Ultra Clean Wide Mouth Glass Bottles, Ready to Use



Description	Qty	Part#	Price \$
Ultra Sensitive High Temp/Low Bleed Septa 9.5 mm (3/8 in.)	50/Pk	40018	OEM
	100/Pk	40018-100	
Ultra Sensitive High Temp/Low Bleed Septa 10 mm	50/Pk	40033	OEM
	100/Pk	40033-100	
Ultra Sensitive High Temp/Low Bleed Septa 11 mm (7/16 in.)	50/Pk	40019	OEM
	100/Pk	40019-100	
Ultra Sensitive High Temp/Low Bleed Septa 17 mm (21/32 in.)	50/Pk	40022	OEM
	100/Pk	40022-100	

Ultra Sensitive General Purpose Medium Temp/Low Bleed Septa, 325°C Max (w/ Guide Hole)

- Injector Temperature 325°C
- Guide Hole for Easy Needle Insertion
- Conditioned For High Sensitivity Analysis, Ultra Low Bleed
- Precision Molded, Easy to Pierce
- Premium Platinum Cured Silicone
- Precise Fit, No Flared Edges
- No Ghost Peaks
- Packaged in Ultra Clean Wide Mouth Glass Bottles, Ready to Use



Description	Qty	Part#	Price \$
Ultra Sensitive High Temp/Low Bleed Septa 9.5 mm (3/8 in.) w/ Guide Hole	50/Pk	40026	OEM
	100/Pk	40026-100	
Ultra Sensitive High Temp/Low Bleed Septa 10 mm w/ Guide Hole	50/Pk	40034	OEM
	100/Pk	40034-100	
Ultra Sensitive High Temp/Low Bleed Septa 11 mm (7/16 in.) w/ Guide Hole	50/Pk	40027	OEM
	100/Pk	40027-100	
Ultra Sensitive High Temp/Low Bleed Septa 17 mm (21/32 in.) w/ Guide Hole	50/Pk	40030	OEM
	100/Pk	40030-100	

GC Ferrules

Vespel®/Graphite

Graphite

Vespel®

Teflon®

- ♦ Agilent (HP)
- ♦ Varian
- ♦ Bruker
- ♦ Perkin Elmer
- ♦ Antek
- ♦ Carlo Erba
- ♦ Finnigan (TMQ)
- ♦ Gow Mac
- ♦ HNU
- ♦ Shimadzu
- ♦ SRI
- ♦ Thermo Scientific
- ♦ Tracor
- ♦ All GC's
- ♦ Specialty Application Ferrules
- ♦ Custom Sizes Available

Vespel®/Graphite Ferrules

60% Polyimide (Vespel®) /40% Graphite Ferrules

- Stable to 400°C
- Minimal Torque Required to Seal
- Reusable, One-piece Design, Precision Drilled
- Excellent for Vacuum & High Pressure Applications
- Recommended for Mass Spec Transfer Line
- Offers the Best Combination of Sealing and Easy Workability
- Packaged in "Ultra Clean" Glass Bottles
- Ferrules for Capillary and Standard Columns



Description	Qty	Part#	Price \$
60% Polyimide (Vespel®)/40% Graphite Ferrule 1/16in. Fitting to 1/16 in. OD Tube	10/pk 50/pk	392611741 392611741-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/16 in. Fitting to No Hole (Blanks)	10/pk 50/pk	392611742 392611742-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/8 in. Fitting to 1/16 in. OD Tube	10/pk 50/pk	392611743 392611743-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/8 in. Fitting to 1/8 in. OD Tube	10/pk 50/pk	392611744 392611744-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/8 in. Fitting to No Hole (Blanks)	10/pk 50/pk	392611745 392611745-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/4 in. Fitting to 1/16 in. OD Tube	10/pk 50/pk	392611746 392611746-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/4 in. Fitting to 1/8 in. OD Tube	10/pk 50/pk	392611747 392611747-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/4 in. Fitting to 1/4 in. OD Tube	10/pk 50/pk	392611748 392611748-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/4 in. Fitting to 6 mm OD Tube	10/pk 50/pk	392611749 392611749-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/4 in. Fitting to No Hole (Blanks)	10/pk 50/pk	392611750 392611750-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/16 in. Fitting to 0.3 mm OD Column	10/pk 50/pk	392611958 392611958-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/16 in. Fitting to 0.4 mm OD Column	10/pk 50/pk	392611959 392611959-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/16 in. Fitting to 0.5 mm OD Column	10/pk 50/pk	392611960 392611960-50	OEM
60% Polyimide (Vespel®)/40% Graphite Ferrule, 400°C, 1/16 in. Fitting to 0.8 mm OD Column	10/pk 50/pk	392611961 392611961-50	OEM

Vespel®/Graphite Ferrules

Agilent (HP) Short 60% Polyimide (Vespel®)/40% Graphite Ferrules

- Recommended for use with Agilent (HP) 4890, 5890, 6890 Inlet Systems
- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Agilent (HP) Short 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. to 0.4 mm OD Column	10/pk 50/pk	392611787 392611787-50	OEM
Agilent (HP) Short 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. to 0.5 mm OD Column	10/pk 50/pk	392611788 392611788-50	OEM
Agilent (HP) Short 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. to 0.8 mm OD Column	10/pk 50/pk	392611789 392611789-50	OEM

Preconditioned 60% Polyimide (Vespel®)/40% Graphite Ferrules, 400°C

- Stable to 400°C
- Offers the Best Combination of Sealing and Easy Workability
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Preconditioned 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. Fitting to 0.3 mm OD Column	10/pk 50/pk	392611962 392611962-50	OEM
Preconditioned 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. Fitting to 0.4 mm OD Column	10/pk 50/pk	392611963 392611963-50	OEM
Preconditioned 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. Fitting to 0.5 mm OD Column	10/pk 50/pk	392611964 392611964-50	OEM
Preconditioned 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. Fitting to 0.8 mm OD Column	10/pk 50/pk	392611965 392611965-50	OEM

Two hole 60% Polyimide (Vespel®)/ 40% Graphite Ferrules, 400°C

- Stable to 400°C
- Reusable, One-piece Design, Precision Drilled
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Two Hole 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. Fitting to 0.5-0.5 mm OD Column	10/pk 50/pk	392611785 392611785-50	OEM
Two Hole 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. Fitting to 0.8-0.8 mm OD Column	10/pk 50/pk	392611786 392611786-50	OEM
Two Hole 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. Fitting to 0.3-0.3 mm OD Column	10/pk 50/pk	392611966 392611966-50	OEM
Two Hole 60% Polyimide (Vespel®)/40% Graphite Ferrule, 1/16 in. Fitting to 0.4-0.4 mm OD Column	10/pk 50/pk	392611967 392611967-50	OEM

Vespel®/Graphite Ferrules

Capillary Ferrules for 1/16" Compression-Type Ferrules

- 60% Polyimide (Vespel®)/ 40% Graphite
- For Agilent Injectors & Detectors; 5890/6890/7890 GCs
- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole "Short"	No Hole	10/pk	32100	OEM
		50/pk	32100-50	
1/16" X 0.3 mm	0.1 mm	10/pk	32101	OEM
		50/pk	32101-50	
1/16" X 0.4 mm	0.2 - 0.25 mm	10/pk	32102	OEM
		50/pk	32102-50	
1/16" X 0.5 mm	0.32 mm	10/pk	32103	OEM
		50/pk	32103-50	
1/16" X 0.8 mm	0.53 mm	10/pk	32104	OEM
		50/pk	32104-50	

Standard Capillary 1/16" Ferrules

- 60% Polyimide (Vespel®)/ 40% Graphite
- Ferrules for capillary columns
- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole	No Hole	10/pk	32108	OEM
		50/pk	32108-50	
1/16" X 1/16"	1/16" TUBE O.D.	10/pk	32109	OEM
		50/pk	32109-50	
1/16" X 0.3 mm	0.1 mm	10/pk	32110	OEM
		50/pk	32110-50	
1/16" X 0.4 mm	0.2 - 0.25 mm	10/pk	32111	OEM
		50/pk	32111-50	
1/16" X 0.5 mm	0.32 mm	10/pk	32112	OEM
		50/pk	32112-50	
1/16" X 0.8 mm	0.45 - 0.53 mm	10/pk	32113	OEM
		50/pk	32113-50	
1/16" X 1.0 mm	0.65 mm	10/pk	32114	OEM
		50/pk	32114-50	
1/16" X 1.2 mm	0.75 mm	10/pk	32115	OEM
		50/pk	32115-50	

Vespel®/Graphite Ferrules

Two Hole 1/16" Ferrules

- 60%Polyimide (Vespel®)/ 40% Graphite
- For 1/16" Compression-Type Fittings
- Use 1/16" Two Hole Ferrules with 1/16" Capillary Adapter Fittings
- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" X 0.4 mm (2-hole)	0.2 - 0.25 mm	10/pk	32118	OEM
		50/pk	32118-50	
1/16" X 0.5 mm (2-hole)	0.32 mm	10/pk	32119	OEM
		50/pk	32119-50	
1/16" X 0.8 mm (2-hole)	0.53 mm	10/pk	32120	OEM
		50/pk	32120-50	

Standard, Capillary & Reducing 1/8" Ferrules

- 60% Polyimide (Vespel®)/ 40% Graphite
- Ferrules for Capillary and Standard Columns
- Packaged in "Ultra Clean" Glass Bottles
- Stable to 400°C



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" x No Hole	No Hole	10/pk	32123	OEM
		50/pk	32123-50	
1/8" X 1/8"	1/8" TUBE O.D.	10/pk	32124	OEM
		50/pk	32124-50	
1/8" X 1/16"	1/16" TUBE O.D.	10/pk	32125	OEM
		50/pk	32125-50	
1/8" X 0.4 mm	0.2 -0.25 mm	10/pk	32126	OEM
		50/pk	32126-50	
1/8" X 0.5 mm	0.32 mm	10/pk	32127	OEM
		50/pk	32127-50	
1/8" X 0.8 mm	0.45 - 0.53 mm	10/pk	32128	OEM
		50/pk	32128-50	
1/8" X 1.0 mm	0.65 mm	10/pk	32129	OEM
		50/pk	32129-50	
1/8" X 1.2 mm	0.75 mm	10/pk	32130	OEM
		50/pk	32130-50	
1/8" X 2.4 mm	2.4 mm O.D. TUBE	10/pk	32131	OEM
		50/pk	32131-50	

Vespel®/Graphite Ferrules

Two Hole 1/8" Ferrules

- 60% Polyimide (Vespel®)/ 40% Graphite
- For 1/8" Compression-Type Fittings
- Use 1/8" Two Hole Ferrules with 1/8" Capillary Adapter Fittings
- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" X 0.5 mm (2-hole)	0.32 mm	10/pk	32134	OEM
		50/pk	32134-50	
1/8" X 0.8 mm (2-hole)	0.53 mm	10/pk	32135	OEM
		50/pk	32135-50	

Standard, Capillary & Reducing 1/4" Ferrules

- 60% Polyimide (Vespel®)/ 40% Graphite
- Ferrules for Capillary and Standard Columns
- Packaged in "Ultra Clean" Glass Bottles
- Stable to 400°C



Description	Fits Column ID	Qty.	Part#	Price \$
1/4" x No Hole	No Hole	10/pk	32138	OEM
		50/pk	32138-50	
1/4" X 1/4"	1/4" TUBE O.D.	10/pk	32139	OEM
		50/pk	32139-50	
1/4" X 1/8"	1/8" TUBE O.D.	10/pk	32141	OEM
		50/pk	32141-50	
1/4" X 1/16"	1/16" TUBE O.D.	10/pk	32142	OEM
		50/pk	32142-50	
1/4" X 3/16"	3/16" TUBE O.D.	10/pk	32143	OEM
		50/pk	32143-50	
1/4" X 0.4 mm	0.2 - 0.25 mm	10/pk	32144	OEM
		50/pk	32144-50	
1/4" X 0.5 mm	0.32 mm	10/pk	32145	OEM
		50/pk	32145-50	
1/4" X 0.8 mm	0.53 mm	10/pk	32146	OEM
		50/pk	32146-50	
1/4" X 1.0 mm	0.65 mm	10/pk	32147	OEM
		50/pk	32147-50	
1/4" X 1.2 mm	0.75 mm	10/pk	32148	OEM
		50/pk	32148-50	
1/4" X 4.0 mm	4.0 mm TUBE O.D.	10/pk	32149	OEM
		50/pk	32149-50	
1/4" X 6.0 mm	6.0 mm TUBE O.D.	10/pk	32150	OEM
		50/pk	32150-50	

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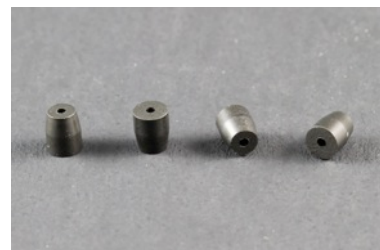
Vespel®/Graphite Ferrules

85% Polyimide (Vespel®) /15% Graphite Ferrules

- Stable to 400°C
- Minimal Torque Required to Seal
- Reusable, One-piece Design, Precision Drilled
- Packaged in "Ultra Clean" Glass Bottles

85%Polyimide (Vespel®)/ 15% Graphite Ferrules, 400°C

- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles
- Excellent for Vacuum & High Pressure Applications



Description	Qty	Part#	Price \$
85% Polyimide (Vespel®)/15% Graphite Ferrule, 400°C, 1/16 in. Fitting to 0.3 mm OD Column	10/pk	392611790	OEM
	50/pk	392611790-50	
85% Polyimide (Vespel®)/15% Graphite Ferrule, 400°C, 1/16 in. Fitting to 0.4 mm OD Column	10/pk	392611791	OEM
	50/pk	392611791-50	
85% Polyimide (Vespel®)/15% Graphite Ferrule, 400°C, 1/16 in. Fitting to 0.5 mm OD Column	10/pk	392611792	OEM
	50/pk	392611792-50	
85% Polyimide (Vespel®)/15% Graphite Ferrule, 400°C, 1/16 in. Fitting to 0.8 mm OD Column	10/pk	392611793	OEM
	50/pk	392611793-50	

Agilent (HP) Short 85% Polyimide (Vespel®)/15% Graphite Ferrules

- Recommended for use with Agilent (HP) 4890, 5890, 6890 Inlet Systems
- Ferrules for capillary columns
- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Agilent (HP) Short 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16 in. to 0.4 mm OD Column	10/pk	392611903	OEM
	50/pk	392611903-50	
Agilent (HP) Short 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16 in. to 0.5 mm OD Column	10/pk	392611904	OEM
	50/pk	392611904-50	
Agilent (HP) Short 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16 in. to 0.8 mm OD Column	10/pk	392611905	OEM
	50/pk	392611905-50	

Vespel®/Graphite Ferrules

Preconditioned 85% Polyimide (Vespel®)/15% Graphite Ferrules

- Preconditioned @ 250°C for 5 Hours
- Recommended for Use with GC/MS
- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Preconditioned, 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16 in. to 0.3 mm OD Column	10/pk 50/pk	392611794 392611794-50	OEM
Preconditioned, 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16 in. to 0.4 mm OD Column	10/pk 50/pk	392611795 392611795-50	OEM
Preconditioned, 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16 in. to 0.5 mm OD Column	10/pk 50/pk	392611796 392611796-50	OEM
Preconditioned, 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16 in. to 0.8 mm OD Column	10/pk 50/pk	392611797 392611797-50	OEM

Two hole 85% Polyimide (Vespel®)/15% Graphite Ferrules, 400°C

- Ferrules for capillary columns
- Stable to 400°C
- Offers the Best Combination of Sealing and Easy Workability
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Two Hole 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16in. to 0.3-0.3 mm OD Column	10/pk 50/pk	392611798 392611798-50	OEM
Two Hole 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16in. to 0.4-0.4 mm OD Column	10/pk 50/pk	392611799 392611799-50	OEM
Two Hole 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16in. to 0.5-0.5 mm OD Column	10/pk 50/pk	392611901 392611901-50	OEM
Two Hole, 85% Polyimide (Vespel®)/15% Graphite Ferrule, 1/16in. to 0.8-0.8 mm OD Column	10/pk 50/pk	392611902 392611902-50	OEM

Vespel®/Graphite Ferrules

Capillary Ferrules for 1/16" Compression-Type Ferrules

- 85% Polyimide (Vespel®)/ 15% Graphite
- For Agilent Injectors & Detectors; 5890/6890/7890 GCs
- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole "Short"	No Hole	10/pk 50/pk	32047 32047-50	OEM
1/16" X 0.3 mm	0.1 mm	10/pk 50/pk	32048 32048-50	OEM
1/16" X 0.4 mm	0.2 - 0.25 mm	10/pk 50/pk	32049 32049-50	OEM
1/16" X 0.5 mm	0.32 mm	10/pk 50/pk	32050 32050-50	OEM
1/16" X 0.8 mm	0.53 mm	10/pk 50/pk	32051 32051-50	OEM

Standard Capillary Ferrules

- 85% Polyimide (Vespel®)/ 15% Graphite
- Stable to 400°C
- Ferrules for Capillary and Standard Columns
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" Standard x No Hole	No Hole	10/pk 50/pk	32055 32055-50	OEM
1/16" X 1/16"	1/16" TUBE O.D.	10/pk 50/pk	32056 32056-50	OEM
1/16" X 0.3 mm	0.1 mm	10/pk 50/pk	32057 32057-50	OEM
1/16" X 0.4 mm	0.2 - 0.25 mm	10/pk 50/pk	32058 32058-50	OEM
1/16" X 0.5 mm	0.32 mm	10/pk 50/pk	32059 32059-50	OEM
1/16" X 0.8 mm	0.45 - 0.53 mm	10/pk 50/pk	32060 32060-50	OEM
1/16" X 1.0 mm	0.65 mm	10/pk 50/pk	32061 32061-50	OEM
1/16" X 1.2 mm	0.75 mm	10/pk 50/pk	32062 32062-50	OEM

Vespel®/Graphite Ferrules

Two Hole Capillary Ferrules

- 85% Polyimide (Vespel®)/ 15% Graphite
- Stable to 400°C
- Ferrules for Capillary and Standard Columns
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" X 0.4 mm (2-hole)	0.2 - 0.25 mm	10/pk	32065	OEM
		50/pk	32065-50	
1/16" X 0.5 mm (2-hole)	0.32 mm	10/pk	32066	OEM
		50/pk	32066-50	
1/16" X 0.8 mm (2-hole)	0.53 mm	10/pk	32067	OEM
		50/pk	32067-50	

Standard, Capillary & Reducing 1/8" Ferrules

- 85% Polyimide (Vespel®)/ 15% Graphite
- Reusable, One-piece Design, Precision Drilled
- Packaged in "Ultra Clean" Glass Bottles
- Stable to 400°C



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" x No Hole	No Hole	10/pk	32073	OEM
		50/pk	32073-50	
1/8" X 1/8"	1/8" TUBE O.D.	10/pk	32074	OEM
		50/pk	32074-50	
1/8" X 1/16"	1/16" TUBE O.D.	10/pk	32075	OEM
		50/pk	32075-50	
1/8" X 0.4 mm	0.2 - 0.25 mm	10/pk	32076	OEM
		50/pk	32076-50	
1/8" X 0.5 mm	0.32 mm	10/pk	32077	OEM
		50/pk	32077-50	
1/8" X 0.8 mm	0.45 - 0.53 mm	10/pk	32078	OEM
		50/pk	32078-50	
1/8" X 1.0 mm	0.65 mm	10/pk	32079	OEM
		50/pk	32079-50	
1/8" X 1.2 mm	0.75 mm	10/pk	32080	OEM
		50/pk	32080-50	
1/8" X 2.4 mm	2.4 mm TUBE O.D.	10/pk	32081	OEM
		50/pk	32081-50	

Vespel®/Graphite Ferrules

Two Hole 1/8" Ferrules

- 85% Polyimide (Vespel®)/ 15% Graphite
- Ferrules for capillary columns
- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" X 0.5 mm (2-hole)	0.32 mm	10/pk	32084	OEM
		50/pk	32084-50	
1/8" X 0.8 mm (2-hole)	0.53 mm	10/pk	32085	OEM
		50/pk	32085-50	

Standard, Capillary & Reducing 1/4" Ferrules

- 85% Polyimide (Vespel®)/ 15% Graphite
- Excellent for Vacuum & High Pressure Applications
- Stable to 400°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/4" x No Hole	No Hole	10/pk	32088	OEM
		50/pk	32088-50	
1/4" X 1/4"	1/4" TUBE O.D.	10/pk	32089	OEM
		50/pk	32089-50	
1/4" X 1/8"	1/8" TUBE O.D.	10/pk	32090	OEM
		50/pk	32090-50	
1/4" X 1/16"	1/16" TUBE O.D.	10/pk	32091	OEM
		50/pk	32091-50	
1/4" X 3/16"	3/16" TUBE O.D.	10/pk	32092	OEM
		50/pk	32092-50	
1/4" X 0.4 mm	0.2 - 0.25 mm	10/pk	32093	OEM
		50/pk	32093-50	
1/4" X 0.5 mm	0.32 mm	10/pk	32094	OEM
		50/pk	32094-50	
1/4" X 0.8 mm	0.53 mm	10/pk	32095	OEM
		50/pk	32095-50	
1/4" X 1.0 mm	0.65 mm	10/pk	32096	OEM
		50/pk	32096-50	
1/4" X 1.2 mm	0.75 mm	10/pk	32097	OEM
		50/pk	32097-50	
1/4" X 4.0 mm	4.0 mm TUBE O.D.	10/pk	32098	OEM
		50/pk	32098-50	
1/4" X 6.0 mm	6.0 mm TUBE O.D.	10/pk	32099	OEM
		50/pk	32099-50	

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Graphite Ferrules

Graphite Ferrules

- Stable to 450°C
- High Purity Graphite, Preferred for Capillary GC Use
- High Density Graphite
- Preconditioned to Eliminate Out-Gassing
- Contains No Binders that can Out-Gas or Absorb Analytes
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Does not stick to Glass or Fused Silica
- Packaged in "Ultra Clean" Glass Bottles

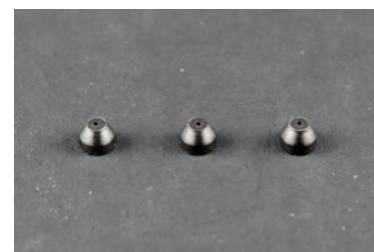


Graphite Ferrules, 450°C

Description	Qty	Part#	Price \$
Graphite Ferrules, 450°C, 1/16 in. Fitting to 1/16 in. OD Tube	10/pk	392611751	OEM
	50/pk	392611751-50	
Graphite Ferrules, 450°C, 1/16 in. Fitting to 1.0 mm OD Tube	10/pk	392611752	OEM
	50/pk	392611752-50	
Graphite Ferrules, 450°C, 1/8 in. Fitting Reducing to 1/16 in. OD Tube	10/pk	392611753	OEM
	50/pk	392611753-50	
Graphite Ferrules, 450°C, 1/8 in. Fitting to 1/8 in. OD Tube	10/pk	392611754	OEM
	50/pk	392611754-50	
Graphite Ferrules, 450°C, 1/4 in. Fitting Reducing to 1/16 in. OD Tube	10/pk	392611756	OEM
	50/pk	392611756-50	
Graphite Ferrules, 450°C, 1/4 in. Fitting Reducing to 1/8 in. OD Tube	10/pk	392611757	OEM
	50/pk	392611757-50	
Graphite Ferrules, 450°C, 1/4 in. Fitting to 1/4 in. OD Tube	10/pk	392611758	OEM
	50/pk	392611758-50	
Graphite Ferrules, 450°C, 1/4 in. Fitting Reducing to 6 mm OD Tube	10/pk	392611759	OEM
	50/pk	392611759-50	
Graphite Ferrules, 450°C, 1/16 in. Fitting to 0.3 mm OD Column	10/pk	392611906	OEM
	50/pk	392611906-50	
Graphite Ferrules, 450°C, 1/16 in. Fitting to 0.4 mm OD Column	10/pk	392611907	OEM
	50/pk	392611907-50	
Graphite Ferrules, 450°C, 1/16 in. Fitting to 0.5 mm OD Column	10/pk	392611908	OEM
	50/pk	392611908-50	
Graphite Ferrules, 450°C, 1/16 in. Fitting to 0.8 mm OD Column	10/pk	392611909	OEM
	50/pk	392611909-50	

Agilent (HP), Short Graphite Ferrules, 450°C

- Recommended for Use with Agilent (HP) 4890, 5890, 6890 Inlet Systems
- Stable to 450°C
- Does not stick to Glass or Fused Silica



Description	Qty	Part#	Price \$
Agilent (HP) Short Graphite Ferrules, 1/16 in. Fitting to 0.4 mm OD Column	10/pk	392611914	OEM
	50/pk	392611914-50	
Agilent (HP) Short Graphite Ferrules, 1/16 in. Fitting to 0.5 mm OD Column	10/pk	392611915	OEM
	50/pk	392611915-50	
Agilent (HP) Short Graphite Ferrules, 1/16 in. Fitting to 0.8 mm OD Column	10/pk	392611916	OEM
	50/pk	392611916-50	

Graphite Ferrules

Jacketed Graphite Ferrules & Capillary Nuts

- Graphite Ferrules for Capillary Columns, jacketed in brass
- Capillary Nut to Fit Jacketed Ferrules
- Stable to 450°C
- Does not stick to Glass or Fused Silica
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Jacketed Ferrules for Varian 1078 Inj., Brass Jacket, 0.4 mm Graphite Ferrule	10/pk 50/pk	392611912 392611912-50	OEM
Jacketed Ferrules for Varian 1078 Inj., Brass Jacket, 0.5 mm Graphite Ferrule	10/pk 50/pk	392611913 392611913-50	OEM
Jacketed Ferrules for Varian 1078 Inj., Brass Jacket, 0.8 mm Graphite Ferrule	10/pk 50/pk	392611755 392611755-50	OEM
Capillary Nut for Varian 1078 Injector, Brass Column Scale Nut	1/pk 10/pk	392611910 392611911	OEM

Graphite O-Rings

- For Agilent and Varian 1177 Injectors
- Excellent thermal stability at injection port temperatures up to 450°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Graphite O-rings, 6.3 mm ID, to fit HP Split 6.3 mm OD liners	10/pk 50/pk	392611935 392611935-50	OEM
Graphite O-rings, 6.5 mm ID, Same as HP 5180-4173	10/pk 50/pk	392611930 392611930-50	OEM
Viton O-Rings 250°C One Size Fits Split/ 6.3 mm & Splitless/ 6.5 mm OD Liners	10/pk 50/pk	392611764 392611764-50	OEM
Graphite O-rings, 6.5 mm I.D. to Fit 1177 Injector, Glass Liners	10/pk 50/pk	392611940 392611940-50	OEM
Graphite O-Rings for Varian and Hp Liners, 450°C, 6.3 mm I.D. for Split Liners	10/pk 50/pk	392611761 392611761-50	OEM
Graphite O-Rings for Varian and HP Liners, 6.5 mm I.D. for Splitless Liners	10/pk 50/pk	392611762 392611762-50	OEM
Graphite O-Rings for Varian 1177 and HP Liners, 6.5 mm I.D.	10/pk 50/pk	392611918 392611918-50	OEM

Graphite Ferrules

Special Graphite Ferrule for Varian Liners, 450°C

- For Varian Split/Splitless 1075/1077/1078 Liners
- Stable to 450°C
- High Density Graphite
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Special 1/4 in. Graphite Ferrule for Varian Split/Splitless 1075/1077 Liner 394936200	10/pk 50/pk	392611763 392611763-50	OEM
Special 5 mm Graphite Ferrule for Varian Split/Splitless 1078 Inj. Liners 392534200	10/pk 50/pk	392611919 392611919-50	OEM

Capillary Graphite Ferrules for 1/16" Compression-Type Ferrules

- For Agilent Injectors & Detectors; 5890/6890/7890 GCs
- Stable to 450°C
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole "Short"	No Hole	10/pk 50/pk	32151 32151-50	OEM
1/16" X 0.3 mm	0.1 mm	10/pk 50/pk	32152 32152-50	OEM
1/16" X 0.4 mm	0.2-0.25 mm	10/pk 50/pk	32153 32153-50	OEM
1/16" X 0.5 mm	0.32 mm	10/pk 50/pk	32154 32154-50	OEM
1/16" X 0.8 mm	0.53 mm	10/pk 50/pk	32155 32155-50	OEM
1/16" X 1.0 mm	0.65 mm	10/pk 50/pk	32156 32156-50	OEM

Short Graphite Ferrules HP Style

- For Agilent Injectors & Columns
- Stable to 450°C
- High Purity Graphite, Preferred for Capillary GC Use
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" X 0.4 mm	0.2-0.25 mm	10/pk 50/pk	32160 32160-50	OEM
1/16" X 0.5 mm	0.32 mm	10/pk 50/pk	32161 32161-50	OEM
1/16" X 0.8 mm	0.53 mm	10/pk 50/pk	32162 32162-50	OEM
1/16" X 1.0 mm	0.65 mm	10/pk 50/pk	32163 32163-50	OEM
1/16" X 1.2 mm	0.75 mm	10/pk 50/pk	32164 32164-50	OEM

Graphite Ferrules

Standard Graphite Capillary 1/16" Ferrules

- Stable to 450°C
- High Purity Graphite, Preferred for Capillary GC Use
- High Density Graphite
- Preconditioned to Eliminate Out-Gassing
- Does not stick to Glass or Fused Silica
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole	No Hole	10/pk	32167	OEM
		50/pk	32167-50	
1/16" X 1/16"	1/16" TUBE O.D.	10/pk	32168	OEM
		50/pk	32168-50	
1/16" X 0.3 mm	0.1 mm	10/pk	32169	OEM
		50/pk	32169-50	
1/16" X 0.4 mm	0.2 - 0.25 mm	10/pk	32170	OEM
		50/pk	32170-50	
1/16" X 0.5 mm	0.32 mm	10/pk	32171	OEM
		50/pk	32171-50	
1/16" X 0.8 mm	0.45 - 0.53 mm	10/pk	32172	OEM
		50/pk	32172-50	
1/16" X 1.0 mm	0.65 mm	10/pk	32173	OEM
		50/pk	32173-50	
1/16" X 1.2 mm	0.75 mm	10/pk	32174	OEM
		50/pk	32174-50	

1/16" Long Graphite Capillary Column Ferrules

- Height = .150"
- Stable to 450°C
- Does not stick to Glass or Fused Silica
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole	No Hole	10/pk	32188	OEM
		50/pk	32188-50	
1/16" X 1/16"	1/16" TUBE O.D.	10/pk	32189	OEM
		50/pk	32189-50	
1/16" X 0.4 mm	0.25 mm	10/pk	32190	OEM
		50/pk	32190-50	
1/16" X 0.5 mm	0.32 mm	10/pk	32191	OEM
		50/pk	32191-50	
1/16" X 0.8 mm	0.53 mm	10/pk	32192	OEM
		50/pk	32192-50	
1/16" X 1.0 mm	0.65 mm	10/pk	32193	OEM
		50/pk	32193-50	
1/16" X 1.2 mm	0.75 mm	10/pk	32194	OEM
		50/pk	32194-50	

Graphite Ferrules

1/16" Extra Long Graphite Capillary Column Ferrules

- Height = .157"
- Stable to 450°C
- High Purity/Density Graphite, Preferred for Capillary GC Use
- Preconditioned to Eliminate Out-Gassing
- Does not stick to Glass or Fused Silica
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole	No Hole	10/pk 50/pk	32178 32178-50	OEM
1/16" X 1/16"	1/16" TUBE O.D.	10/pk 50/pk	32179 32179-50	OEM
1/16" X 0.4 mm	0.2 - 0.25 mm	10/pk 50/pk	32180 32180-50	OEM
1/16" X 0.5 mm	0.32 mm	10/pk 50/pk	32181 32181-50	OEM
1/16" X 0.8 mm	0.53 mm	10/pk 50/pk	32182 32182-50	OEM
1/16" X 1.0 mm	0.65 mm	10/pk 50/pk	32183 32183-50	OEM
1/16" X 1.2 mm	0.75 mm	10/pk 50/pk	32184 32184-50	OEM

1/16" Long Taper, Graphite Capillary Column Ferrules

- Height = .180"
- Stable to 450°C
- Contains No Binders that can Out-Gas or Absorb Analytes
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole	No Hole	10/pk 50/pk	32198 32198-50	OEM
1/16" X 1/16"	1/16" TUBE O.D.	10/pk 50/pk	32199 32199-50	OEM
1/16" X 0.4 mm	0.25 mm	10/pk 50/pk	32200 32200-50	OEM
1/16" X 0.5 mm	0.32 mm	10/pk 50/pk	32201 32201-50	OEM
1/16" X 0.8 mm	0.53 mm	10/pk 50/pk	32202 32202-50	OEM
1/16" X 1.0 mm	0.65 mm	10/pk 50/pk	32203 32203-50	OEM
1/16" X 1.2 mm	0.75 mm	10/pk 50/pk	32204 32204-50	OEM

Graphite Ferrules

Two Hole Graphite 1/16" Ferrules

- Stable to 450°C
- High Purity Graphite, Preferred for Capillary GC Use
- High Density Graphite
- Does not stick to Glass or Fused Silica
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" X 0.4 mm (2-hole)	0.2 - 0.25 mm	10/pk	32207	OEM
		50/pk	32207-50	OEM
1/16" X 0.5 mm (2-hole)	0.32 mm	10/pk	32208	OEM
		50/pk	32208-50	OEM
1/16" X 0.8 mm (2-hole)	0.53 mm	10/pk	32209	OEM
		50/pk	32209-50	OEM

Standard, Graphite Capillary & Reducing 1/8" Ferrules

- Stable to 450°C
- Preconditioned to Eliminate Out-Gassing
- Contains No Binders that can Out-Gas or Absorb Analytes
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" x No Hole	No Hole	10/pk	32215	OEM
		50/pk	32215-50	OEM
1/8" X 1/8"	1/8" TUBE O.D.	10/pk	32216	OEM
		50/pk	32216-50	OEM
1/8" X 1/16"	1/16" TUBE O.D.	10/pk	32217	OEM
		50/pk	32217-50	OEM
1/8" X 0.4 mm	0.2 - 0.25 mm	10/pk	32218	OEM
		50/pk	32218-50	OEM
1/8" X 0.5 mm	0.32 mm	10/pk	32219	OEM
		50/pk	32219-50	OEM
1/8" X 0.8 mm	0.45-0.53 mm	10/pk	32220	OEM
		50/pk	32220-50	OEM
1/8" X 1.0 mm	0.65 mm	10/pk	32221	OEM
		50/pk	32221-50	OEM
1/8" X 1.2 mm	0.75 mm	10/pk	32222	OEM
		50/pk	32222-50	OEM

Graphite Ferrules

1/8" Graphite Ferrule

- Length = 0.265"
- Stable to 450°C
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Does not stick to Glass or Fused Silica
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" x No Hole	No Hole	10/pk	32226	OEM
		50/pk	32226-50	OEM
1/8" X 1/8"	1/8" TUBE O.D.	10/pk	32227	OEM
		50/pk	32227-50	OEM
1/8" X 1/16"	1/16" TUBE O.D.	10/pk	32228	OEM
		50/pk	32228-50	OEM
1/8" X 0.4 mm	0.25 mm	10/pk	32229	OEM
		50/pk	32229-50	OEM
1/8" X 0.5 mm	0.32 mm	10/pk	32230	OEM
		50/pk	32230-50	OEM
1/8" X 0.8 mm	0.53 mm	10/pk	32231	OEM
		50/pk	32231-50	OEM
1/8" X 1.0 mm	0.65 mm	10/pk	32232	OEM
		50/pk	32232-50	OEM
1/8" X 1.2 mm	0.75 mm	10/pk	32233	OEM
		50/pk	32233-50	OEM

1/8" Graphite Ferrule (With Tail)

- Length = 0.300"
- Stable to 450°C
- High Density Graphite
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" X 1/16"	1/16" TUBE O.D.	10/pk	32237	OEM
		50/pk	32237-50	OEM
1/8" X 0.4 mm	0.25 mm	10/pk	32238	OEM
		50/pk	32238-50	OEM
1/8" X 0.5 mm	0.32 mm	10/pk	32239	OEM
		50/pk	32239-50	OEM
1/8" X 0.8 mm	0.53 mm	10/pk	32240	OEM
		50/pk	32240-50	OEM
1/8" X 1.0 mm	0.65 mm	10/pk	32241	OEM
		50/pk	32241-50	OEM
1/8" X 1.2 mm	0.75 mm	10/pk	32242	OEM
		50/pk	32242-50	OEM

Graphite Ferrules

1/8" Graphite Front Ferrules

- Length = 0.200"
- Stable to 450°C
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Does not stick to Glass or Fused Silica
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" X 1/8"	1/8" O.D. TUBE	10/pk	32246	OEM
		50/pk	32246-50	
1/8" X 1.2 mm	0.75 mm	10/pk	32247	OEM
		50/pk	32247-50	

1/8" Graphite Two Hole Ferrules

- Stable to 450°C
- High Purity Graphite, Preferred for Capillary GC Use
- High Density Graphite
- Preconditioned to Eliminate Out-Gassing
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" X 0.5 mm (2-hole)	0.32 mm	10/pk	32250	OEM
		50/pk	32250-50	
1/8" X 0.8 mm (2-hole)	0.53 mm	10/pk	32251	OEM
		50/pk	32251-50	

3/16" Graphite Ferrule

- Stable to 450°C
- Contains No Binders that can Out-Gas or Absorb Analytes
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
3/16" X 3/16"	3/16" TUBE O.D.	10/pk	32254	OEM
		50/pk	32254-50	

Graphite Ferrules

Standard, Capillary & Reducing 1/4" Graphite Ferrules

- Stable to 450°C
- High Density Graphite
- Preconditioned to Eliminate Out-Gassing
- Does not stick to Glass or Fused Silica
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/4" x No Hole	No Hole	10/pk 50/pk	32257 32257-50	OEM
1/4" X 1/4"	1/4" TUBE O.D.	10/pk 50/pk	32258 32258-50	OEM
1/4" X 1/8"	1/8" TUBE O.D.	10/pk 50/pk	32259 32259-50	OEM
1/4" X 1/16"	1/16" TUBE O.D.	10/pk 50/pk	32260 32260-50	OEM
1/4" X 3/16"	3/16" TUBE O.D.	10/pk 50/pk	32261 32261-50	OEM
1/4" X 0.4 mm	0.2 - 0.25 mm	10/pk 50/pk	32262 32262-50	OEM
1/4" X 0.5 mm	0.32 mm	10/pk 50/pk	32263 32263-50	OEM
1/4" X 0.8 mm	0.53 mm	10/pk 50/pk	32264 32264-50	OEM
1/4" X 1.0 mm	0.65 mm	10/pk 50/pk	32265 32265-50	OEM
1/4" X 1.2 mm	0.75 mm	10/pk 50/pk	32266 32266-50	OEM
1/4" X 4.0 mm	4.0 mm TUBE O.D.	10/pk 50/pk	32267 32267-50	OEM
1/4" X 6.0 mm	6.0 mm TUBE O.D.	10/pk 50/pk	32268 32268-50	OEM
1/4" X 6.0 mm DBL TAPER	6.0 mm TUBE O.D.	10/pk 50/pk	32269 32269-50	OEM

Graphite Ferrules

1/4" Front Graphite Ferrules

- Stable to 450°C
- High Density Graphite
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/4" X 1/4"	1/4" TUBE O.D.	10/pk 50/pk	32272 32272-50	OEM
1/4" X 1/8"	1/8" TUBE O.D.	10/pk 50/pk	32273 32273-50	OEM
1/4" X 6.0 mm	6.0 mm TUBE O.D.	10/pk 50/pk	32274 32274-50	OEM

Large Graphite Ferrules

- Stable to 450°C
- Larger Ferrules for Large Tube Applications
- Does not stick to Glass or Fused Silica
- For High Temperature Applications



Description	Fits Column OD	Qty.	Part#	Price \$
6 mm	6 mm TUBE O.D.	10/pk 50/pk	32277 32277-50	OEM
8 mm	8 mm TUBE O.D.	10/pk 50/pk	32278 32278-50	OEM
10 mm	10 mm TUBE O.D.	10/pk 50/pk	32279 32279-50	OEM
12 mm	12 mm TUBE O.D.	10/pk 50/pk	32280 32280-50	OEM
3/8"	3/8" TUBE O.D.	10/pk 50/pk	32281 32281-50	OEM
3/8"	No Hole	10/pk 50/pk	32282 32282-50	OEM
1/2"	1/2" TUBE O.D.	10/pk 50/pk	32283 32283-50	OEM
5/8"	5/8" TUBE O.D.	10/pk 50/pk	32284 32284-50	OEM
3/4"	3/4" TUBE O.D.	10/pk 50/pk	32285 32285-50	OEM
7/8"	7/8" TUBE O.D.	10/pk 50/pk	32286 32286-50	OEM
1"	1" TUBE O.D.	10/pk 50/pk	32287 32287-50	OEM
1.25"	1.25" TUBE O.D.	10/pk 50/pk	32288 32288-50	OEM
1.50"	1.50" TUBE O.D.	10/pk 50/pk	32289 32289-50	OEM

Graphite Ferrules

Mini Union MSUV, 100% Graphite Ferrules

- Stable to 450°C
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
0.5 mm ID	0.25- 0.32 mm	10/pk	32290	OEM
		50/pk	32290-50	
0.8 mm ID	0.53 mm	10/pk	32291	OEM
		50/pk	32291-50	

Carlo Erba, Graphite Ferrules

- Fit most Carlo Erba Instruments
- Stable to 450°C
- High Purity Graphite, Preferred for Capillary GC Use
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
0.5 mm ID	M5 NUT	10/pk	32294	OEM
		50/pk	32294-50	
0.8 mm ID	M8 NUT	10/pk	32295	OEM
		50/pk	32295-50	

Shimadzu, Graphite Ferrules

- 5mm Fit Shimadzu 17A GCs
- 1/16" Fits 17A, 2010, 2014 GCs
- Stable to 450°C
- Preconditioned to Eliminate Out-Gassing
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
5.0 mm	5.0 mm TUBE O.D.	10/pk	32298	OEM
		50/pk	32298-50	
1/16" X 0.5 mm (2-Piece)	0.35 mm	10/pk	32299	OEM
		50/pk	32299-50	
1/16" X 0.8 mm (2-Piece)	0.53 mm	10/pk	32300	OEM
		50/pk	32300-50	
1/16" X 0.5 mm	0.35 mm	10/pk	32301	OEM
		50/pk	32301-50	
1/16" x 0.8 mm	0.53 mm	10/pk	32302	OEM
		50/pk	32302-50	

Graphite Ferrules

Graphite O-Rings/Sealing O-Rings

- Excellent thermal stability at injection port
- Temperature Stability to 450°C
- Contains No Binders that can Out-Gas or Absorb Analytes
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
6.35 mm ID/ 9.63 mm O.D.	6.35 mm	10/pk	32305	OEM
		50/pk	32305-50	
6.52 MM ID/ 9.63 mm O.D.	6.52 mm	10/pk	32306	OEM
		50/pk	32306-50	
1/16" Sealing O-Ring	1/16" TUBE O.D.	10/pk	32307	OEM
		50/pk	32307-50	
1/8" Sealing O-Ring	1/8" TUBE O.D.	10/pk	32308	OEM
		50/pk	32308-50	
1/4" Sealing O-Ring	1/4" TUBE O.D.	10/pk	32309	OEM
		50/pk	32309-50	

Ultra Clean Graphite Ferrule, 450°C

- Temperature Programmed Conditioning at 400°C
- Fifty Programmed Ramp Ups in GC oven
- Stable to 450°C
- High Density Graphite
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Packaged in "Ultra Clean" Glass Bottles with Special Yellow "Keep Clean" Label



Description	Qty	Part#	Price \$
Ultra Clean 5mm Preconditioned Graphite Ferrules for Varian, Bruker & Agilent Chromatographs	2/pk	392534202	OEM
	10/pk	392534201	

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

100% Polyimide (Vespel®) Ferrules

- 350° C Upper Temperature Limit. One Piece Ferrule Design
- May Bleed at Higher Temperatures
- Excellent Physical Properties 100% High Temperature Polyimide (Vespel®)
- Does not Cold Flow
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Polyimide (Vespel®) Ferrules, 350°C, 1/16 in. Fitting to No Hole (Blanks)	10/pk 50/pk	392611766 392611766-50	OEM
Polyimide (Vespel®) Ferrules, 350°C, 1/16 in. Fitting to 1/16 in. OD Tube	10/pk 50/pk	392611765 392611765-50	OEM
Polyimide (Vespel®) Ferrules, 350°C, 1/8 in. Fitting to No Hole (Blanks)	10/pk 50/pk	392611769 392611769-50	OEM
Polyimide (Vespel®) Ferrules, 350°C, 1/8 in. Fitting Reducing to 1/16 in. OD Tube	10/pk 50/pk	392611767 392611767-50	OEM
Polyimide (Vespel®) Ferrules, 350°C, 1/8 in. Fitting to 1/8 in. OD Tube	10/pk 50/pk	392611768 392611768-50	OEM
Polyimide (Vespel®) Ferrules, 350°C, 1/4 in. Fitting Reducing to 1/16 in. OD Tube	10/pk 50/pk	392611770 392611770-50	OEM
Polyimide (Vespel®) Ferrules, 350°C, 1/4 in. Fitting Reducing to 1/8 in. OD Tube	10/pk 50/pk	392611771 392611771-50	OEM
Polyimide (Vespel®) Ferrules, 350°C, 1/4 in. Fitting to 1/4 in. OD Tube	10/pk 50/pk	392611772 392611772-50	OEM
Polyimide (Vespel®) Ferrules, 350°C, 1/4 in. Fitting to No Hole (Blanks)	10/pk 50/pk	392611774 392611774-50	OEM

Capillary Ferrules for 1/16" Compression-Type Ferrules

- 100% Polyimide (Vespel®)
- For Agilent Injectors & Detectors; 5890/6890/7890 GCs
- Does not Cold Flow
- Packaged in "Ultra Clean" Glass Bottle



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole "Short"	No Hole	10/pk 50/pk	32000 32000-50	OEM
1/16" X 0.3 mm	0.1 mm	10/pk 50/pk	32001 32001-50	OEM
1/16" X 0.4 mm	0.2 - 0.25 mm	10/pk 50/pk	32002 32002-50	OEM
1/16" X 0.5 mm	0.32 mm	10/pk 50/pk	32003 32003-50	OEM
1/16" X 0.8 mm	0.53 mm	10/pk 50/pk	32004 32004-50	OEM

Standard Capillary Ferrules

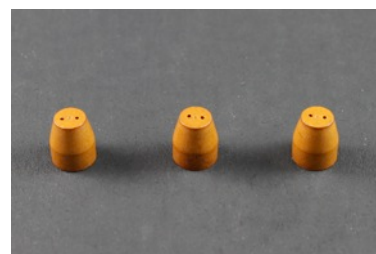
- 100% Polyimide (Vespel®)
- 350° C Upper Temperature Limit. One Piece Ferrule Design
- Excellent Physical Properties 100% High Temperature Polyimide (Vespel®)
- Does not Cold Flow
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole	No Hole	10/pk	32005	OEM
		50/pk	32005-50	
1/16" X 1/16"	1/16" TUBE O.D.	10/pk	32006	OEM
		50/pk	32006-50	
1/16" X 0.3 mm	0.1 mm	10/pk	32007	OEM
		50/pk	32007-50	
1/16" X 0.4 mm	0.2 - 0.25 mm	10/pk	32008	OEM
		50/pk	32008-50	
1/16" X 0.5 mm	0.32 mm	10/pk	32009	OEM
		50/pk	32009-50	
1/16" X 0.8 mm	0.45 - 0.53 mm	10/pk	32010	OEM
		50/pk	32010-50	
1/16" X 1.0 mm	0.65 mm	10/pk	32011	OEM
		50/pk	32011-50	
1/16" X 1.2 mm	0.75 mm	10/pk	32012	OEM
		50/pk	32012-50	

Two Hole Capillary Ferrules

- 100% Polyimide (Vespel®)
- 350° C Upper Temperature Limit. One Piece Ferrule Design
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" X 0.4 mm (2-hole)	0.2 - 0.25 mm	10/pk	32015	OEM
		50/pk	32015-50	
1/16" X 0.5 mm (2-hole)	0.32 mm	10/pk	32016	OEM
		50/pk	32016-50	
1/16" X 0.8 mm (2-hole)	0.53 mm	10/pk	32017	OEM
		50/pk	32017-50	

Standard, Capillary & Reducing 1/8" Ferrules

- 100% Polyimide (Vespel®)
- 350° C Upper Temperature Limit. One Piece Ferrule Design
- Does not Cold Flow
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" x No Hole	No Hole	10/pk 50/pk	32020 32020-50	OEM
1/8" X 1/8"	1/8" TUBE O.D.	10/pk 50/pk	32021 32021-50	OEM
1/8" X 1/16"	1/16" TUBE O.D.	10/pk 50/pk	32022 32022-50	OEM
1/8" X 0.4 mm	0.2 -0.25 mm	10/pk 50/pk	32023 32023-50	OEM
1/8" X 0.5 mm	0.32 mm	10/pk 50/pk	32024 32024-50	OEM
1/8" X 0.8 mm	0.45 - 0.53 mm	10/pk 50/pk	32025 32025-50	OEM
1/8" X 1.0 mm	0.65 mm	10/pk 50/pk	32026 32026-50	OEM
1/8" X 1.2 mm	0.75 mm	10/pk 50/pk	32027 32027-50	OEM
1/8" X 2.4 mm	2.4 mm TUBE O.D.	10/pk 50/pk	32028 32028-50	OEM

Two Hole 1/8" Ferrules

- 100% Polyimide (Vespel®)
- 350° C Upper Temperature Limit. One Piece Ferrule Design
- Excellent Physical Properties 100% High Temperature Polyimide (Vespel®)
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" X 0.5 mm (2-hole)	0.32 mm	10/pk 50/pk	32031 32031-50	OEM
1/8" X 0.8 mm (2-hole)	0.53 mm	10/pk 50/pk	32032 32032-50	OEM

Standard, Capillary & Reducing 1/4" Ferrules

- 100% Polyimide (Vespel®)
- 350° C Upper Temperature Limit. One Piece Ferrule Design
- May Bleed at Higher Temperatures
- Excellent Physical Properties 100% High Temperature Polyimide (Vespel®)
- Does not Cold Flow
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/4" x No Hole	No Hole	10/pk	32035	OEM
		50/pk	32035-50	
1/4" X 1/4"	1/4" TUBE O.D.	10/pk	32036	OEM
		50/pk	32036-50	
1/4" X 1/8"	1/8" TUBE O.D.	10/pk	32037	OEM
		50/pk	32037-50	
1/4" X 1/16"	1/16" TUBE O.D.	10/pk	32038	OEM
		50/pk	32038-50	
1/4" X 3/16"	3/16" TUBE O.D.	10/pk	32039	OEM
		50/pk	32039-50	
1/4" X 0.4 mm	0.2 - 0.25 mm	10/pk	32040	OEM
		50/pk	32040-50	
1/4" X 0.5 mm	0.32 mm	10/pk	32041	OEM
		50/pk	32041-50	
1/4" X 0.8 mm	0.53 mm	10/pk	32042	OEM
		50/pk	32042-50	
1/4" X 1.0 mm	0.65 mm	10/pk	32043	OEM
		50/pk	32043-50	
1/4" X 1.2 mm	0.75 mm	10/pk	32044	OEM
		50/pk	32044-50	
1/4" X 4.0 mm	4.0 mm TUBE O.D.	10/pk	32045	OEM
		50/pk	32045-50	
1/4" X 6.0 mm	6.0 mm TUBE O.D.	10/pk	32046	OEM
		50/pk	32046-50	

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Teflon® Ferrules

Teflon® Ferrules

- 250° C Upper Temperature Limit
- Non Sticking. One Piece Ferrule Design
- 100% Teflon® (PTFE). Chemically Inert
- Packaged in "Ultra Clean" Glass Bottles



Description	Qty	Part#	Price \$
Teflon® Ferrules, 250°C, 1/16 in. Fitting to 1/16 in. OD Tube	10/pk 50/pk	392611775 392611775-50	OEM
Teflon® Ferrules, 250°C, 1/16 in. Fitting to No Hole (Blanks)	10/pk 50/pk	392611776 392611776-50	OEM
Teflon® Ferrules, 250°C, 1/8 in. Fitting Reducing to 1/16 in. OD Tube	10/pk 50/pk	392611777 392611777-50	OEM
Teflon® Ferrules, 250°C, 1/8 in. Fitting to 1/8 in. OD Tube	10/pk 50/pk	392611778 392611778-50	OEM
Teflon® Ferrules, 250°C, 1/4 in. Fitting Reducing to 6 mm OD Tube	10/pk 50/pk	392611783 392611783-50	OEM
Teflon® Ferrules, 250°C, 1/4 in. Fitting to No Hole (Blanks)	10/pk 50/pk	392611784 392611784-50	OEM
Teflon® Ferrules, 250°C, 1/8 in. Fitting to No Hole (Blanks)	10/pk 50/pk	392611779 392611779-50	OEM
Teflon® Ferrules, 250°C, 1/4 in Fitting Reducing to 1/16 in. OD Tube	10/pk 50/pk	392611780 392611780-50	OEM
Teflon® Ferrules, 250°C, 1/4 in. Fitting Reducing to 1/8 in. OD Tube	10/pk 50/pk	392611781 392611781-50	OEM
Teflon® Ferrules, 250°C, 1/4 in. Fitting Reducing to 1/4 in. OD Tube	10/pk 50/pk	392611782 392611782-50	OEM

Capillary Ferrules for 1/16" Compression-Type Ferrules

- 100% Teflon® (PTFE)
- Standard Capillary Ferrules
- 250° C Upper Temperature Limit
- Non Sticking, One Piece Ferrule Design
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" x No Hole	No Hole	10/pk	32316	OEM
		50/pk	32316-50	OEM
1/16" X 1/16"	1/16" TUBE O.D.	10/pk	32317	OEM
		50/pk	32317-50	OEM
1/16" X 0.3 mm	0.1 mm	10/pk	32318	OEM
		50/pk	32318-50	OEM
1/16" X 0.4 mm	0.2 - 0.25 mm	10/pk	32319	OEM
		50/pk	32319-50	OEM
1/16" X 0.5 mm	0.32 mm	10/pk	32320	OEM
		50/pk	32320-50	OEM
1/16" X 0.8 mm	0.45 - 0.53 mm	10/pk	32321	OEM
		50/pk	32321-50	OEM
1/16" X 1.0 mm	0.65 mm	10/pk	32322	OEM
		50/pk	32322-50	OEM
1/16" X 1.2 mm	0.75 mm	10/pk	32323	OEM
		50/pk	32323-50	OEM

1/16" Two Hole Capillary Ferrules

- 100% Teflon® (PTFE)
- 250° C Upper Temperature Limit
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/16" X 0.4 mm (2-hole)	0.2 - 0.25 mm	10/pk	32326	OEM
		50/pk	32326-50	OEM
1/16" X 0.5 mm (2-hole)	0.32 mm	10/pk	32327	OEM
		50/pk	32327-50	OEM
1/16" X 0.8 mm (2-hole)	0.53 mm	10/pk	32328	OEM
		50/pk	32328-50	OEM

Teflon® Ferrules

Standard, Capillary & Reducing 1/8" Ferrules

- 100% Teflon® (PTFE)
- 250° C Upper Temperature Limit
- Non Sticking. One Piece Ferrule Design
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" x No Hole	No Hole	10/pk	32331	OEM
		50/pk	32331-50	
1/8" X 1/8"	1/8" TUBE O.D.	10/pk	32332	OEM
		50/pk	32332-50	
1/8" X 1/16"	1/16" TUBE O.D.	10/pk	32333	OEM
		50/pk	32333-50	
1/8" X 0.4 mm	0.2 - 0.25 mm	10/pk	32334	OEM
		50/pk	32334-50	
1/8" X 0.5 mm	0.32 mm	10/pk	32335	OEM
		50/pk	32335-50	
1/8" X 0.8 mm	0.45 - 0.53 mm	10/pk	32336	OEM
		50/pk	32336-50	
1/8" X 1.0 mm	0.65 mm	10/pk	32337	OEM
		50/pk	32337-50	
1/8" X 1.2 mm	0.75 mm	10/pk	32338	OEM
		50/pk	32338-50	

Two Hole 1/8" Ferrules

- 100% Teflon® (PTFE)
- 250° C Upper Temperature Limit
- Non Sticking. One Piece Ferrule Design
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/8" X 0.5 mm (2-hole)	0.32 mm	10/pk	32341	OEM
		50/pk	32341-50	
1/8" X 0.8 mm (2-hole)	0.53 mm	10/pk	32342	OEM
		50/pk	32342-50	

Teflon® Ferrules

Standard, Capillary & Reducing 1/4" Ferrules

- 100% Teflon® (PTFE)
- 250° C Upper Temperature Limit
- Non Sticking. One Piece Ferrule Design
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
1/4" x No Hole	No Hole	10/pk	32345	OEM
		50/pk	32345-50	OEM
1/4" X 1/4"	1/4" TUBE O.D.	10/pk	32346	OEM
		50/pk	32346-50	OEM
1/4" X 1/8"	1/8" TUBE O.D.	10/pk	32347	OEM
		50/pk	32347-50	OEM
1/4" X 1/16"	1/16" TUBE O.D.	10/pk	32348	OEM
		50/pk	32348-50	OEM
1/4" X 3/16"	3/16" TUBE O.D.	10/pk	32349	OEM
		50/pk	32349-50	OEM
1/4" X 0.4 mm	0.2 - 0.25 mm	10/pk	32350	OEM
		50/pk	32350-50	OEM
1/4" X 0.5 mm	0.32 mm	10/pk	32351	OEM
		50/pk	32351-50	OEM
1/4" X 0.8 mm	0.53 mm	10/pk	32352	OEM
		50/pk	32352-50	OEM
1/4" X 1.0 mm	0.65 mm	10/pk	32353	OEM
		50/pk	32353-50	OEM
1/4" X 1.2 mm	0.75 mm	10/pk	32354	OEM
		50/pk	32354-50	OEM
1/4" X 4.0 mm	4.0 mm TUBE O.D.	10/pk	32355	OEM
		50/pk	32355-50	OEM
1/4" X 6.0 mm	6.0 mm TUBE O.D.	10/pk	32356	OEM
		50/pk	32356-50	OEM

Large ID Ferrules

- 100% Teflon® (PTFE)
- 250° C Upper Temperature Limit
- Packaged in "Ultra Clean" Glass Bottles



Description	Fits Column ID	Qty.	Part#	Price \$
3/8" x 3/8"	3/8" TUBE O.D.	10/pk	32359	OEM
		50/pk	32359-50	OEM
3/8" x No Hole	No Hole	10/pk	32360	OEM
		50/pk	32360-50	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Specialty Ferrules

Specialty Ferrules

- Special Application Ferrules
- Available In Polyimide, Polyimide/Graphite and Brass
- Fits Some Varian & Bruker GC's

Specialty 60% Polyimide (Vespel®) /40% Graphite Ferrules

- Stable to 400°C
- Minimal Torque Required to Seal
- Reusable, One-piece Design, Precision Drilled
- Excellent for Vacuum & High Pressure Applications
- Packaged in "Ultra Clean" Glass Bottles



Description	I.D.	Qty.	Part#	Price \$
1/16" 60% Polyimide (Vespel®)/40% Graphite, 0.145"-0.150" Height	0.048"-0.050"	10/pk	DY50502500-10	OEM

Specialty Brass Ferrules

- To Fit Special Varian/Bruker/Agilent Fittings
- High Temperature Rating



Description	I.D.	O.D.	Qty.	Part#	Price \$
Brass, 40° Angle, 0.160" Height	0.050"	0.246"	10/pk	393753801-10	OEM

Specialty 100% Polyimide (Vespel®) Ferrules

- 350° C Upper Temperature Limit. One Piece Ferrule Design
- May Bleed at Higher Temperatures
- Excellent Physical Properties 100% High Temperature Polyimide (Vespel®)
- Does not Cold Flow
- Packaged in "Ultra Clean" Glass Bottles



Description	I.D.	O.D.	Qty.	Part#	Price \$
Vaporizer, 100% Polyimide (Vespel®), 20° Angle	0.198" - 0.200"	0.3325"	10/pk	393733901-10	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

GC Purifiers

Fit over 80 different models of Gas Chromatographs

- ♦ Agilent
- ♦ Beckman
- ♦ Bruker
- ♦ Carlo Erba
- ♦ Chrompack
- ♦ CTC Analytics
- ♦ Dani
- ♦ Dynatech
- ♦ Gilson
- ♦ Hewlett Packard
- ♦ Hitachi
- ♦ Merck
- ♦ Perkin-Elmer
- ♦ Pharmacia
- ♦ Shimadzu
- ♦ Siemens
- ♦ Spark
- ♦ Spectra-Physics
- ♦ Varian

GC Purifiers

We offer several types of purifiers for removal of moisture, hydrocarbon, oxygen, and other chemicals from carrier gases.

All have been proven cost effective in preventing column degradation, eliminating baseline drift and maximizing the accuracy of analytical data.

They have been designed for optimum rate and breakthrough capacity. For best overall results in contaminant removal they should be used in combination.

Hydrocarbon/Water Gas Purifier

- Conditions eight cylinders of 99.999% purity (200 ft³/ea) to less than 1 ppm Hydrocarbon and Water.
- Pressure rating : 250 PSI
- 1/8" Brass Fittings
- Volume: 120cc Size: 1.3" OD x 11" L
- Spun Aluminum Chamber



Description	Old Varian Liner #	Qty	Part#	Price \$
Hydrocarbon/Water Gas Purifier	03-949862-00	1/pk 5/pk	394986200 394986200-5	OEM

Oxygen Gas Purifier

- Conditions four cylinders of 99.999% purity (200 ft³/ea) to less than 1 ppm O₂.
- Pressure rating : 250 PSI
- 1/8" Brass Fittings
- Volume: 120cc Size: 1.3" OD x 11" L
- Spun Aluminum Chamber



Description	Old Varian Liner #	Qty	Part#	Price \$
Oxygen Gas Purifier	03-949770-02	1/pk 5/pk	394977002 394977002-5	OEM

Hydrocarbon/Water Gas Purifier w/ Moisture Indicator

- Moisture indicator changes color when saturated
- Removes Moisture & Hydrocarbons
- Made from Clear Lexan®
- 1/8" Brass Fitting
- Volume: 200cc Size: 2" OD x 10.25" L
- Pressure Rating: 100 PSI
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Hydrocarbon/Water Gas Purifier w/ Moisture Indicator	1/pk 5/pk	30000 30000-5	OEM

Pencil Filters

- Removes moisture and hydrocarbons
- Usable in small areas
- 1/8" Brass Fittings
- Aluminum chamber
- Various lengths available
- Custom materials available



Description	Qty	Part#	Price \$
Filter, 4.81 in., Clear, Flow Module (Moisture/Hydrocarbons)	1/pk	391713401	OEM
	5/pk	391713401-5	
Filter, 4.81 in., Gold, Flow Module (Hydrocarbons)	1/pk	391713402	OEM
	5/pk	391713402-5	
Filter, 2.02 in., Clear, Flow Module, Short (Hydrocarbons)	1/pk	391895901	OEM
	5/pk	391895901-5	
Filter, 1.62 in., Gold, Flow Module (Moisture/Hydrocarbons)	1/pk	391895902	OEM
	5/pk	391895902-5	

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Visalite 6000™

High Capacity Gas Purifiers

Fits over 80 different models of Gas Chromatographs

- ♦ Agilent
- ♦ Beckman
- ♦ Bruker
- ♦ Carlo Erba
- ♦ Chrompack
- ♦ CTC Analytics
- ♦ Dani
- ♦ Dynatech
- ♦ Gilson
- ♦ Hewlett Packard
- ♦ Hitachi
- ♦ Merck
- ♦ Perkin-Elmer
- ♦ Pharmacia
- ♦ Shimadzu
- ♦ Siemens
- ♦ Spark
- ♦ Spectra-Physics
- ♦ Varian

Visalite 6000 Purifiers

Hydrocarbon Gas Purifier

- Conditions more than ten cylinders of 99.999% purity (200 ft³/ea) to less than 1 ppm Hydrocarbon
- Spherical high capacity materials
- Pressure rating: 250 PSI
- 1/8" Brass Fittings
- Volume: 120cc Size: 1.30" OD x 11.0" L
- Spun Aluminum Chamber



Description	Qty	Part#	Price \$
Hydrocarbon Gas Purifier	1/pk	30001	OEM
	5/pk	30001-5	

H₂O Gas Purifier

- Conditions more than ten cylinders of 99.999% purity (200 ft³/ea) to less than 1 ppm Water
- Spherical high capacity materials
- Pressure rating: 250 PSI
- 1/8" Brass Fittings
- Volume: 120cc Size: 1.30" OD x 11.0" L
- Spun Aluminum Chamber



Description	Qty	Part#	Price \$
100% H ₂ O Gas Purifier	1/pk	30002	OEM
	5/pk	30002-5	

H₂O/Hydrocarbon Gas Purifier

- Conditions more than ten cylinders of 99.999% purity (200 ft³/ea) to less than 1 ppm Water and Hydrocarbon
- Spherical high capacity materials
- Pressure rating: 250 PSI
- 1/8" Brass Fittings
- Volume: 120cc Size: 1.30" OD x 11.0" L
- Spun Aluminum Chamber



Description	Qty	Part#	Price \$
H ₂ O/Hydrocarbon Gas Purifier	1/pk	30003	OEM
	5/pk	30003-5	

Oxygen/Hydrocarbon Gas Purifier

- Conditions six cylinders of 99.999% purity (200 ft³/ea) to less than 1 ppm O₂ and Hydrocarbon
- Spherical high capacity materials
- Pressure rating : 250 PSI
- 1/8" Brass Fittings
- Volume: 120cc Size: 1.30" OD x 11.0" L
- Spun Aluminum Chamber



Description	Qty	Part#	Price \$
Oxygen/Hydrocarbon Gas Purifier	1/pk	30004	OEM
	5/pk	30004-5	

Visalite 6000 Purifiers

Oxygen/H₂O Gas Purifier

- Conditions five cylinders of 99.999% purity (200 ft³/ea) to less than 1 ppm O₂ and H₂O
- Spherical high capacity materials
- Pressure rating: 250 PSI
- 1/8" Brass Fittings
- Volume: 120cc Size: 1.30" OD x 11.0" L
- Spun Aluminum Chamber



Description	Qty	Part#	Price \$
Oxygen/H ₂ O Gas Purifier	1/pk	30005	OEM
	5/pk	30005-5	

Oxygen Gas Purifier

- Conditions six cylinders of 99.999% purity (200 ft³/ea) to less than 1 ppm O₂
- Spherical high capacity materials
- Pressure rating: 250 PSI
- 1/8" Brass Fittings
- Volume: 120cc Size: 1.30" OD x 11.0" L
- Spun Aluminum Chamber



Description	Qty	Part#	Price \$
100% O ₂ Gas Purifier	1/pk	30006	OEM
	5/pk	30006-5	

Hydrocarbon/Water Gas Purifier w/ Moisture Indicator

- Moisture indicator changes color when saturated
- Removes Moisture & Hydrocarbons
- Made from Clear Lexan®
- Spherical high capacity materials
- 1/8" Brass Fitting
- Volume: 200cc Size: 2" OD x 10.25" L
- Pressure Rating: 100 PSI
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Hydrocarbon/Water Gas Purifier w/ Moisture Indicator	1/pk	30007	OEM
	5/pk	30007-5	

Visalite 6000 Purifiers

Hydrocarbon Gas Purifier

- Removes Hydrocarbons
- Made from Clear Lexan®
- Spherical high capacity materials
- 1/8" Brass Fitting
- Volume: 200cc Size: 2" OD x 10.25" L
- Pressure Rating: 100 PSI
- Removes: HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Hydrocarbon Gas Purifier	1/pk	30008	OEM
	5/pk	30008-5	

H₂O Gas Purifier

- Removes Moisture
- Made from Clear Lexan®
- Spherical high capacity materials
- 1/8" Brass Fitting
- Volume: 200cc Size: 2" OD x 10.25" L
- Pressure Rating: 100 PSI
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
H ₂ O Gas Purifier	1/pk	30009	OEM
	5/pk	30009-5	

H₂O Gas Purifier w/ Moisture Indicator

- Moisture indicator changes color when saturated
- Removes Moisture
- Made from Clear Lexan®
- Spherical high capacity materials
- 1/8" Brass Fitting
- Volume: 200cc Size: 2" OD x 10.25" L
- Pressure Rating: 100 PSI
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
H ₂ O Gas Purifier w/ Moisture Indicator	1/pk	30010	OEM
	5/pk	30010-5	

Visalite 6000 Purifiers

Hydrocarbon Large Gas Purifier

- Lexan® construction
- Removes hydrocarbons
- Spherical high capacity materials
- 1/8" Brass Fitting
- Volume: 825cc Size: 3.75" OD x 7.25" L
- Pressure Rating: 50 PSI
- Removes: HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Hydrocarbon Large Purifier	1/pk	30011	OEM
	5/pk	30011-5	

H₂O Large Gas Purifier

- Lexan® construction
- Removes moisture
- Spherical high capacity materials
- 1/8" Brass Fitting
- Volume: 825cc Size: 3.75" OD x 7.25" L
- Pressure Rating: 50 PSI
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
H ₂ O Large Gas Purifier	1/pk	30012	OEM
	5/pk	30012-5	

H₂O Large Gas Purifier w/ Moisture Indicator

- Lexan® construction
- Removes moisture
- Moisture indicator changes color when saturated
- Spherical high capacity materials
- 1/8" Brass Fitting
- Volume: 825cc Size: 3.75" OD x 7.25" L
- Pressure Rating: 50 PSI
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
H ₂ O Large Purifier w/ Moisture Indicator	1/pk	30013	OEM
	5/pk	30013-5	

Visalite 6000 Purifiers

Moisture/Hydrocarbon Large Gas Purifier w/ Moisture Indicator

- Lexan® construction
- Removes moisture and hydrocarbons
- Moisture indicator changes color when saturated
- Spherical high capacity materials
- 1/8" Brass Fitting
- Volume: 825cc Size: 3.75" OD x 7.25" L
- Pressure Rating: 50 PSI
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Moisture/Hydrocarbon Large Gas Purifier w/ Moisture Indicator	1/pk	30014	OEM
	5/pk	30014-5	

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Specialty Gas Purifiers

Specialty Gas Purifiers

We offer several speciality purifiers for removal of Water, Hydrogen Chloride, Sulphur Dioxide, Hydrogen Sulphide, Carbon Dioxide, Hydrocarbons, Oil, and Small Aliphatics. They have been designed for optimum rate and breakthrough capacity.

Indicating Moisture Removal Tube w/ Bracket

- Teflon tube construction w/ aluminum ends, bracket, & Teflon tubing
- Indicating moisture material
- For small areas where moisture is a concern
- Ambient applications
- Teflon Inlet Tube - 0.085" OD
- Pressure Rating: 20 PSI
- Volume: 3.75cc Size: 0.500" OD x 3.25" L



Description	Qty	Part#	Price \$
Indicating Moisture Removal Tube w/ Bracket	1/pk	30015	OEM
	5/pk	30015-5	

Indicating Moisture Removal Tube

- Teflon tube construction w/ aluminum ends & Teflon tubing
- Indicating moisture material
- For small areas where moisture is a concern
- Teflon Inlet Tube - 0.085" OD
- Pressure Rating: 20 PSI
- Volume: 3.75cc Size: 0.500" OD x 3.25" L



Description	Qty	Part#	Price \$
Indicating Moisture Removal Tube	1/pk	30016	OEM
	5/pk	30016-5	

Hydrocarbon/Water Gas Purifier w/ Moisture Indicator

- Moisture indicator changes color when saturated
- Removes Moisture & Hydrocarbons
- Made from Clear Lexan®
- 1/8" Brass Fitting
- Pressure Rating: 100 PSI
- Volume: 200cc Size: 2" OD x 10.25" L
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Hydrocarbon/Water Gas Purifier w/ Moisture Indicator	1/pk	30017	OEM
	5/pk	30017-5	

Specialty Gas Purifiers

Indicating Moisture & Hydrocarbon Removal Purifier

- Lexan® construction
- Removes moisture and hydrocarbons
- Moisture indicator changes color when saturated
- Spherical high-capacity materials
- Chrome-plated brass quick disconnect couplings to connect 1/4" tubes
- Volume: 250cc Size: 2" OD x 8.5" L
- Pressure Rating: 100 PSI
- Other Fitting options available
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Indicating Moisture & Hydrocarbon Removal Purifier	1/pk	30018	OEM
	5/pk	30018-5	

Hydrocarbon/Moisture Removal w/ Indicating Media

- Lexan® construction
- Removes moisture and hydrocarbons
- Moisture indicator changes color when saturated
- Chrome-plated brass quick disconnect couplings to connect 1/4" tubes
- Volume: 250cc Size: 2" OD x 8.5" L
- Pressure Rating: 100 PSI
- Other fitting options available
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Indicating Moisture & Hydrocarbon Removal Purifier	1/pk	30019	OEM
	5/pk	30019-5	

Hydrocarbon/Moisture Purifier

- Lexan® construction
- Removes moisture and hydrocarbons
- Moisture indicator changes color when saturated
- Nickel-plated Brass Push to connect fitting: Fits 1/4" Tubing
- Volume: 275cc Size: 2" OD x 9" L
- Pressure Rating: 100 PSI
- Other Fitting options available
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Hydrocarbon/Moisture Purifier	1/pk	30020	OEM
	5/pk	30020-5	

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Specialty Gas Purifiers

Ultra Fine Moisture/Hydrocarbon/Indicating Purifier

- Lexan® construction
- Removes moisture and hydrocarbons
- Moisture indicator changes color when saturated
- Pre & Post Ultra Fine Balston Particulate Filters
- Removes 99.9999% of all particles over 0.1µm
- Anarak o-ring clip-lok fittings
- Square ends for mounting
- Volume: 625cc Size: 3.25" OD x 8.5" L
- Pressure Rating: 20 PSI
- Other Fitting options available
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Ultra Fine Moisture/Hydrocarbon/Indicating Purifier	1/pk	30021	OEM
	5/pk	30021-5	

Moisture/Hydrocarbon Large Purifier w/ Ultra Fine Post Particulate Filter

- Lexan® construction
- Removes moisture and hydrocarbons
- Moisture indicator changes color when saturated
- Ultra fine Balston particulate filter on outlet
- Removes 99.99% of all particles over 0.1µm
- Inlet/Outlet Teflon Tubing
- Volume: 825cc Size: 3.75" OD x 7.25" L
- Pressure Rating: 20 PSI
- Other Fitting options available
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Moisture/Hydrocarbon Large Purifier w/ Ultra-Fine Post Particulate Filter	1/pk	30022	OEM
	5/pk	30022-5	

Moisture/Hydrocarbon Jumbo Purifier w/ Ultra-Fine Post Particulate Filter

- Lexan® construction
- Removes moisture and hydrocarbons
- Moisture indicator changes color when saturated
- Ultra Fine Balston Particulate Filter on outlet
- Removes 99.99% of all particles over 0.1µm
- Inlet/Outlet Teflon Tubing
- Volume: 1650cc Size per filter: 3.75" OD x 7.25"L (Dual Filters)
- Pressure Rating: 20 PSI
- Other Fitting options available
- Removes: H₂O, HCl, SO₂, NO₂, H₂S, CO₂, Oil, & Small Aliphatics



Description	Qty	Part#	Price \$
Moisture/Hydrocarbon Jumbo Purifier w/ Ultra-Fine Post Particulate Filter	1/pk	30023	OEM
	5/pk	30023-5	

Autosampler Vials

Fit over 80 different models of Gas & Liquid Chromatographs

- ♦ Agilent
- ♦ Beckman
- ♦ Bruker
- ♦ Carlo Erba
- ♦ Chrompack
- ♦ CTC Analytics
- ♦ Dani
- ♦ Dynatech
- ♦ Gilson
- ♦ Hewlett Packard
- ♦ Hitachi
- ♦ Merck
- ♦ Perkin-Elmer
- ♦ Pharmacia
- ♦ Shimadzu
- ♦ Siemens
- ♦ Spark
- ♦ Spectra-Physics
- ♦ Varian

Reference Chart

*Refer to Reference Letters on the left side of the following pages for the proper vial to fit your instrument

Instrument Brand & Model	REFERENCE LETTER A	REFERENCE LETTER B	REFERENCE LETTER C	REFERENCE LETTER D	REFERENCE LETTER E	REFERENCE LETTER N	REFERENCE LETTER O	REFERENCE LETTER P
Agilent (HP) 1042, 1080, 1082, 1084	X		X					
Agilent (HP) 1050, 1090(LC), 1100, 1200	X		X	X	X			
Agilent (HP) 1100 Well Plate/ Nano Flow								
Agilent (HP) 1200 Well Plate/ SL Plus	X	X	X	X	X			
Agilent (HP) 5890, 6890, 7670A	X		X					
Agilent (HP) 7671 A, 7673 A/B, 8042	X		X					
Agilent (HP) 6850 (22 Pos. Tray)						X		
Agilent (HP) 7693A	X	X	X	X	X	X	X	
Agilent (HP) 7673A, 7683A	X		X	X	X			
Agilent (HP) 7985, 5880, 5890	X		X	X	X			
Agilent (HP) 6850 (27 Pos. Tray), 6890	X		X	X	X			
Agilent (HP) CTCSTS+HTCPAL+CTCGCPAL	X		X	X	X			
Beckman 501, 502, 502E, 507, 507E	X	X	X	X	X			
Beckman Marathon Promis	X	X	X	X	X			
Beckman Triathlon (Standard Tray)	X	X	X	X	X			
Carlo Erba 8000, AS 800	X	X	X	X	X			
Carlo Erba AS100, AS200LC, AS300	X	X	X	X	X		X	
Carlo Erba AS200, AS200S	X	X	X	X	X			
Carlo Erba AS 800 (42 & 60 Vial Tray)	X	X	X	X	X			
Carlo Erba 205 Series, 300 Series	X	X	X	X	X	X		X
Carlo Erba AS V42, AS105	X		X					
Chrompack CP-9010 & CP-910, 911, 912	X	X	X	X	X			
Chrompack CP-940, 941	X		X					
CTC Analytics A105S	X		X					
Danials 39.80	X		X					
Dynatech (42 & 60 Vial Trays)	X		X					
Finnigan A200S	X	X	X	X	X	X		
Gilson Aspec, Asted	X		X					
Gilson Rack 30P	X	X	X	X	X			
Hitachi AS2000, AS4000	X	X	X	X				
Hitachi AS6000, S6551		X		X				



12 x 32mm, 2mL Crimp Top Standard Opening Glass & Polypropylene Vials & Kits (Clear & Amber)



12 x 32mm, 2mL, 8-425 Screw Top Standard Opening Glass & Polypropylene Vials & Kits (Clear & Amber)



12 x 32mm, 2mL Crimp Top Wide Opening Glass Vials & Kits (Clear & Amber)



12 x 32mm, 2mL, 9mm Screw Top Wide Opening Glass Vials & Kits (Clear & Amber)



12 x 32mm, 2mL Snap Top Wide Opening Glass Vials & Kits (Clear & Amber)



15 x 45mm, 4mL Screw Top Glass Vials & Kits (Clear & Amber) 13-425 Screw



8 x 40mm, 1mL Push-in Cap Glass & Polypropylene Vials



12 x 32mm, 2mL Screw Top Wide, 10-425 Screw Opening Glass Vials & Kits (Clear & Amber)

Reference Chart

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Instrument Brand & Model	REFERENCE LETTER A	REFERENCE LETTER B	REFERENCE LETTER C	REFERENCE LETTER D	REFERENCE LETTER E	REFERENCE LETTER N	REFERENCE LETTER O	REFERENCE LETTER P
Jasco AS-851, AS-950		X		X				
Merck AS2000	X	X	X	X				
Merck AS4000	X		X					
Perkin-Elmer 2000, 8300, B2000		X		X				
Perkin-Elmer 400, 420B, 4900	X		X					
Perkin-Elmer Ai-1 (42 vial tray)	X		X		X			
Perkin-Elmer AS2000, AS2000B	X		X		X			
Perkin-Elmer AS300, AS8300 Autosystem	X		X		X			
Perkin-Elmer AS 100, AS 1 GOB		X		X				
Perkin-Elmer AS100, AS100B	X		X		X			
Perkin-Elmer AS200, AS300		X		X				
Perkin-Elmer Autosystem	X		X					
Perkin-Elmer Integral 4000 (42 vial tray)	X		X					
Perkin-Elmer ISS-100		X		X				
Perkin-Elmer ISS-100 (42 Vial Tray)	X		X					
Perkin-Elmer Series 200 (205 Vial Tray)	X		X		X			X
Perkin-Elmer ISS-200 (42 Vial Tray)	X		X					
Perkin-Elmer ISS-225 (205 Vial Tray)	X		X		X			X
Perkin-Elmer ISS-225 (60 & 100 Vial Trays)	X		X		X			X
Perkin-Elmer LC30		X		X				
Perkin-Elmer LC600 (60 vial tray)	X	X		X				
Perkin-Elmer Clarus 400, 500, 600	X		X		X			
Pharmacia 2157-010	X	X	X	X	X			
Shimadzu SIL-2AS, SIL-6A	X		X	X	X	X		X
Shimadzu AOC-5000	X		X	X	X			
Shimadzu SIL-6A		X		X				
Shimadzu LC 20A	X	X	X	X	X	X		X
Shimadzu SIL-6B, SIL-9A	X	X	X	X	X			
Siemens AS200, AS32	X		X					
Spark Midas, Marathon, Promis	X	X	X	X	X			
Spark SPH 125, Triathalon	X		X					



12 x 32mm, 2mL Crimp Top Standard Opening Glass & Polypropylene Vials & Kits (Clear & Amber)



12 x 32mm, 2mL, 8-425 Screw Top Standard Opening Glass & Polypropylene Vials & Kits (Clear & Amber)



12 x 32mm, 2mL Crimp Top Wide Opening Glass Vials & Kits (Clear & Amber)



12 x 32mm, 2mL, 9mm Screw Top Wide Opening Glass Vials & Kits (Clear & Amber)



12 x 32mm, 2mL Snap Top Wide Opening Glass Vials & Kits (Clear & Amber)



15 x 45mm, 4mL Screw Top Glass Vials & Kits (Clear & Amber) 13-425 Screw



8 x 40mm, 1mL Push-in Cap Glass & Polypropylene Vials



12 x 32mm, 2mL Screw Top Wide, 10-425 Screw Opening Glass Vials & Kits (Clear & Amber)

Reference Chart

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Instrument Brand & Model	REFERENCE LETTER A	REFERENCE LETTER B	REFERENCE LETTER C	REFERENCE LETTER D	REFERENCE LETTER E	REFERENCE LETTER N	REFERENCE LETTER O	REFERENCE LETTER P
Spectra-Physics 7110, 8110	X		X					
Spectra-Physics 8875, 8880	X	X	X	X	X			
Thermo Fisher Scientific	X	X	X	X	X			
Varian Prostar 400 (Std. 96 Pos. Tray)	X	X	X	X	X			X
Varian Prostar 410 (Large Cap 96 Pos Tray)	X	X	X	X	X			X
Varian Prostar 410 (Std. 48 Pos. Tray)	X	X	X	X	X			X
Varian Prostar 420 (Std. 96 Pos. Tray)	X	X	X	X	X		X	X
Varian Prostar 420 (LSV 72 Pos. Tray)						X		
Varian Prostar 430 (48 Pos. Tray)	X	X	X	X	X			
Varian 8000, 8100	X	X	X	X	X			
Varian 8200	X	X	X	X	X			X
Varian 8035		X		X				
Varian CP-910, CP-911, CP-912	X	X	X	X	X			
Varian CP-940, CP-941	X		X		X			
Varian 8400 (100 Pos.), 8410	X	X	X	X	X			
Varian Combi PAL & GC PAL (98 Pos.)	X		X	X	X			
Varian Combi PAL SPME Mode (98 Pos.)	X		X	X	X			
Varian LC9100/9095/9090	X		X	X	X			
Varian Vista		X		X				
Varian CP 9010	X	X	X	X	X			
Varian Marathon Basic (98 Pos. Tray)	X	X	X	X	X			
Varian CP-8410/8034/8035/8100/8200	X	X	X		X			
Varian CP-9095/9100/920-LC/940-LC	X	X	X		X			
Waters Acquity Sample Organizer	X		X	X	X			
Waters Acquity, CapLC, Nano	X		X	X	X			
Waters Acquity UPLC Systems				X		X		
Waters 2767, 2707, 2777	X	X	X					
Waters WISP (48 Pos.)						X	X	
Waters WISP (96 Pos.), 717, 96 Pos Carousel							X	
Waters Alliance HT System	X		X	X	X			X
Waters Alliance 2790, 2795, 2690, 2695	X		X	X	X			X
Waters Alliance GPC 2000						X		



12 x 32mm, 2mL Crimp Top Standard Opening Glass & Polypropylene Vials & Kits (Clear & Amber)



12 x 32mm, 2mL, 8-425 Screw Top Standard Opening Glass & Polypropylene Vials & Kits (Clear & Amber)



12 x 32mm, 2mL Crimp Top Wide Opening Glass Vials & Kits (Clear & Amber)



12 x 32mm, 2mL, 9mm Screw Top Wide Opening Glass Vials & Kits (Clear & Amber)



12 x 32mm, 2mL Snap Top Wide Opening Glass Vials & Kits (Clear & Amber)



15 x 45mm, 4mL Screw Top Glass Vials & Kits (Clear & Amber) 13-425 Screw



8 x 40mm, 1mL Push-in Cap Glass & Polypropylene Vials



12 x 32mm, 2mL Screw Top Wide, 10-425 Screw Opening Glass Vials & Kits (Clear & Amber)



12 x 32 mm, 2ml, 9mm Screw Top Wide Opening Glass Vial Kits

- 9mm thread design, 40% larger opening
- Reduces the chance of bent or broken needles
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray



Description	Qty	Part#	Price \$
Clear glass 2.0ml screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/red rubber septa	100/pk	392611542	OEM
Amber glass 2.0ml screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/red rubber septa	100/pk	392611543	OEM
Clear glass 2.0ml screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/silicone septa	100/pk	392611549	OEM
Clear glass 2.0ml screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/butyl rubber septa	100/pk	392611633	OEM
Amber glass 2.0ml screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/silicone septa	100/pk	392611550	OEM
Amber glass 2.0ml screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/butyl rubber septa	100/pk	392611834	OEM
Clear glass 2.0ml screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/silicone/PTFE septa	100/pk	392611546	OEM
Amber glass 2.0ml screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/silicone/PTFE septa	100/pk	392611547	OEM
Clear glass 2.0ml screw top wide opening vial; screw cap, 9mm red polypropylene with pre-slit blue PTFE/silicone septa	100/pk	392611555	OEM
Clear glass 2.0ml Silanized screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/silicone septa	100/pk	392611553	OEM
Clear glass 2.0ml Silanized screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/butyl rubber septa	100/pk	392611836	OEM
Amber glass 2.0ml Silanized screw top wide opening vial; screw cap, 9mm red polypropylene with PTFE/silicone septa	100/pk	392611838	OEM
Clear 2.0ml screw wide; 200µL Glass Insert, conical point interior, no spring required; Screw cap, 9mm red polypropylene with PTFE/red rubber septa	100/pk	392611545	OEM
Clear 2.0ml screw wide; 200µL Glass Insert, conical point interior, no spring required; Screw cap, 9mm red polypropylene with PTFE/silicone septa	100/pk	392611552	OEM
Clear 2.0ml screw wide; 200µL Glass Insert, conical point interior, no spring required; Cap, 9mm red polypropylene with PTFE/butyl rubber septa	100/pk	392611636	OEM



12 x 32 mm, 2ml, 9mm Screw Top Wide Opening Glass Vial Kits

Description	Qty	Part#	Price \$
Clear 2.0ml screw wide;200µL Glass Insert polymer spring, conical precision mandrel interior; Cap, 9mm red polypropylene with PTFE/red rubber septa	100/pk	392611544	OEM
Clear 2.0ml screw wide;200µL Glass Insert polymer spring, conical precision mandrel interior; Cap, 9mm red polypropylene with PTFE/silicone septa	100/pk	392611551	OEM
Clear 2.0ml screw wide;200µL Glass Insert polymer spring, conical precision mandrel interior; Cap, 9mm red polypropylene, PTFE/butyl rubber septa	100/pk	392611835	OEM
Clear 2.0ml screw wide;200µL Insert polymer spring, conical precision mandrel interior; Cap, 9mm red polypropylene with PTFE/silicone/PTFE septa	100/pk	392611548	OEM
Clear 2.0ml screw wide;200µL Silanized Insert polymer spring, conical precision mandrel interior; Cap, 9mm red polypropylene, PTFE/silicone septa	100/pk	392611554	OEM
Clear 2.0ml screw wide;200µL Silanized Insert polymer spring, conical precision mandrel interior; Cap, 9mm red polypropylene, PTFE/butyl rubber septa	100/pk	392611837	OEM



12 x 32 mm, 2ml, 9mm Screw Top Wide Opening Glass Vials

- 40% more area for reliable needle penetration
- Compatible with most autosamplers
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass. Packaged in one-piece clamshell tray
- Silane treated vials and inserts available for polar compounds i.e., amines, pesticides, phenols, proteins, etc.

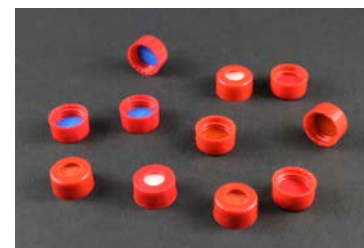


Description	Qty	Part#	Price \$
Clear glass 2.0ml screw top wide opening vial	100/pk	392611653	OEM
Clear glass 2.0ml screw top wide opening vial, Silanized	100/pk	392611655	OEM
Amber glass 2.0ml screw top wide opening vial	100/pk	392611654	OEM
Amber glass 2.0ml screw top wide opening vial, Silanized	100/pk	392611879	OEM



9mm Screw Caps With Septa

- Compatible with most robotic autosamplers
- Sure-sealing polypropylene caps
- Convenient, clean pre-inserted septa
- Five septa to choose from



Description	Qty	Part#	Price \$
9mm Screw cap, red polypropylene w/PTFE silicone septa	100/pk	392611659	OEM
9mm Screw cap, red polypropylene w/PTFE/butyl rubber septa	100/pk	392611661	OEM
9mm Screw cap, red polypropylene w/PTFE/red rubber septa	100/pk	392611657	OEM
9mm Screw cap, red polypropylene w/PTFE/silicone/PTFE septa	100/pk	392611658	OEM
9mm Screw cap, red polypropylene w/pre-slit blue PTFE/silicone septa	100/pk	392611660	OEM



Microvolume 200µL Glass Inserts for 12 x 32 mm 2mL Wide Opening Vials

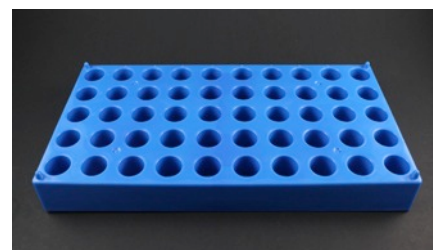
- 200µL inserts
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.



Description	Qty	Part#	Price \$
200µL Glass Insert, conical point interior, no spring required	100/pk	392611596	OEM
	1000/pk	392611596-10	
200µL Silanized Glass Insert, conical point interior, no spring required	100/pk	392611855	OEM
	1000/pk	392611855-10	
200µL Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611594	OEM
	1000/pk	392611594-10	
200µL Silanized Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611595	OEM
	1000/pk	392611595-10	

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM
	5/pk	392611517-5	

Polypropylene Gridded Vial Storage Box

- Holds (100) 12 x 32 mm vials
- Hinged lid w/ secure snap closure
- Alpha-Numeric numbers/letters on grids for easy sample ID
- Clear polypropylene for easy identification
- Stackable w/ writing panel on lid front for ID
- Rugged, compact design, and raised edges for non-slip storage
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Gridded Vial Storage Box	5/pk	50001	OEM

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12 x 32 mm, 2ml Crimp Top Wide Opening Glass Vial Kits

- 40% larger opening.
- Reduces the chance of bent or broken needles.
- Improved autosampler needle accuracy & handling.
- Post baked Teflon/silicone septa for increased performance.
- Lot to lot quality assurance with lot number coding.
- Type 1 borosilicate glass.
- Packaged in a sturdy, easy open, one-piece clamshell tray.
- New Improved Teflon/red rubber septa for increased performance.
- Silane treated vials and inserts available for polar compounds i.e., amines, pesticides, phenols, proteins, etc.
- 11mm aluminum open hole crimp caps.



Description	Qty	Part#	Price \$
Clear glass 2.0ml crimp top wide opening vial; crimp cap, 11mm silver aluminum with PTFE/red rubber septa	100/pk	392611518	OEM
Amber glass 2.0ml crimp top wide opening vial; crimp cap, 11mm silver aluminum with PTFE/red rubber septa	100/pk	392611519	OEM
Clear glass 2.0ml crimp top wide opening vial; crimp cap, 11mm silver aluminum with PTFE/butyl rubber septa	100/pk	392611818	OEM
Amber glass 2.0ml crimp top wide opening vial; crimp cap, 11mm silver aluminum with PTFE/butyl rubber septa	100/pk	392611819	OEM
Clear glass 2.0ml crimp top wide opening vial; crimp cap, 11mm silver aluminum with PTFE/silicone septa	100/pk	392611525	OEM
Amber glass 2.0ml crimp top wide opening vial; crimp cap, 11mm silver aluminum with PTFE/silicone septa	100/pk	392611526	OEM
Clear glass 2.0ml Silanized crimp top wide opening vial; crimp cap, 11mm silver aluminum with PTFE/red rubber septa	100/pk	392611523	OEM
Amber glass 2.0ml Silanized crimp top wide opening vial; crimp cap, 11mm silver aluminum with PTFE/red rubber septa	100/pk	392611825	OEM
Clear glass 2.0ml Silanized crimp top wide opening vial; crimp cap, 11mm silver aluminum with PTFE/butyl rubber septa	100/pk	392611823	OEM
Clear 2.0ml crimp top wide opening; 200µL glass Inserts, conical point interior, no spring required; 11mm silver aluminum, PTFE/red rubber septa	100/pk	392611521	OEM
Clear 2.0ml crimp wide; 200µL Inserts, conical point interior, no spring required; Crimp cap, 11mm silver aluminum with PTFE/butyl rubber septa	100/pk	392611821	OEM
Clear 2.0ml crimp top wide opening; 200µL glass Inserts, conical point interior, no spring required; 11mm silver aluminum crimp, PTFE/silicone septa	100/pk	392611528	OEM
Amber 2.0ml crimp top wide; 200µL glass Inserts polymer spring, conical precision formed mandrel interior; 11mm silver aluminum, PTFE/red rubber septa	100/pk	392611522	OEM
Clear 2.0ml crimp top wide; 200µL glass Inserts polymer spring, conical precision formed mandrel interior; 11mm silver aluminum, PTFE/red rubber septa	100/pk	392611520	OEM
Amber 2.0ml crimp wide; 200µL Inserts polymer spring, conical precision mandrel interior; Cap, 11mm silver aluminum with PTFE/butyl rubber septa	100/pk	392611822	OEM



12 x 32 mm, 2ml Crimp Top Wide Opening Glass Vial Kits (Continued)

Description	Qty	Part#	Price \$
Clear 2.0ml crimp wide; 200µL Inserts polymer spring, conical precision mandrel interior; Cap, 11mm silver aluminum, PTFE/butyl rubber septa	100/pk	392611820	OEM
Clear 2.0ml crimp top wide; 200µL glass Inserts polymer spring, conical precision formed mandrel interior; 11mm silver aluminum, PTFE/silicone septa	100/pk	392611527	OEM
Clear 2.0ml crimp wide; 200µL Silanized glass Inserts polymer spring, conical precision mandrel interior; 11mm silver aluminum, PTFE/red rubber septa	100/pk	392611524	OEM
Amber 2.0ml crimp wide; 200µL glass Inserts polymer spring, conical precision mandrel interior; 11mm silver aluminum, PTFE/silicone septa	100/pk	392611529	OEM
Clear 2.0ml crimp wide; 200µL Silanized Inserts polymer spring, conical precision mandrel interior; Cap, 11mm silver aluminum, PTFE/butyl rubber septa	100/pk	392611824	OEM



12 x 32 mm, 2ml Crimp Top Wide Opening Glass Vials

- 40% more area for reliable needle penetration. Compatible with most autosamplers
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass. Packaged in one-piece clamshell tray
- Silane treated vials and inserts available for polar compounds i.e., amines, pesticides, phenols, proteins, etc.
- 11mm aluminum open hole crimp caps available



Description	Qty	Part#	Price \$
Clear glass 2.0ml crimp top wide opening vial	100/pk	392611634	OEM
Clear glass 2.0ml crimp top wide opening vial, silanized	100/pk	392611637	OEM
Amber glass 2.0ml crimp top wide opening vial	100/pk	392611635	OEM
Amber glass 2.0ml crimp top wide opening vial, silanized	100/pk	392611638	OEM



11mm Aluminum Crimp Caps with Septa

- Crimp-tight aluminum caps.
- Convenient, clean pre-installed septa.
- Three septa to choose from.



Description	Qty	Part#	Price \$
11mm Crimp Cap, aluminum PTFE/Red rubber septa	100/pk	392611627	OEM
11mm Crimp Cap, aluminum PTFE/Butyl rubber septa	100/pk	392611632	OEM
11mm Crimp Cap, aluminum PTFE/Silicone septa	100/pk	392611631	OEM
11mm Crimp Cap, aluminum with PTFE/Red rubber septa	144/pk	99779701	OEM



11mm Colored Crimp Caps w/ Septa

- Crimp tight aluminum caps
- Five colors of caps for easy identification



Description	Qty	Part No.	Price \$
11mm crimp cap, aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627 392611627-10	OEM
11mm crimp cap, gold aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627GD 392611627GD-10	OEM
11mm crimp cap, blue aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627B 392611627B-10	OEM
11mm crimp cap, green aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627G 392611627G-10	OEM
11mm crimp cap, red aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627R 392611627R-10	OEM



Microvolume 200µL Glass Inserts for 12 x 32 mm 2mL Wide Opening Vials

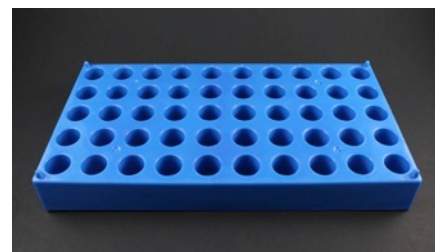
- 200µL inserts.
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume.
- Self-aligning spring for correct insert position.
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts.
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass.



Description	Qty	Part#	Price \$
200µL Glass Insert, conical point interior, no spring required	100/pk 1000/pk	392611596 392611596-10	OEM
200µL Silanized Glass Insert, conical 4 point interior, no spring required	100/pk 1000/pk	392611855 392611855-10	OEM
200µL Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk 1000/pk	392611594 392611594-10	OEM
200µL Silanized Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk 1000/pk	392611595 392611595-10	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM
	5/pk	392611517-5	

Polypropylene Gridded Vial Storage Box

- Holds (100) 12 x 32 mm vials
- Hinged lid w/ secure snap closure
- Alpha-Numeric numbers/letters on grids for easy sample ID
- Clear polypropylene for easy identification
- Stackable w/ writing panel on lid front for ID
- Rugged, compact design, and raised edges for non-slip storage
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Gridded Vial Storage Box	5/pk	50001	OEM

11 mm Crimper & Decapper

- Easy to use
- Adjustable crimping depth
- Permits minor handle pressure
- Decapper removes crimped seals from vials



Description	Qty	Part#	Price \$
Hand Crimper for 11mm Crimp Caps	1/pk	AL666011	OEM
Hand Decapper for 11mm Crimp Caps	1/pk	AL98711	OEM

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12 x 32 mm, 2ml Screw Top Standard Opening Glass Vial Kits

- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray
- 8-425 Black Screw caps
- Post baked Teflon/silicone septa for increased performance



Description	Qty	Part#	Price \$
Clear glass 2.0ml screw top standard opening vial; Screw cap, 8mm black polypropylene with PTFE/silicone septa	100/pk	392611530	OEM
Amber glass 2.0ml screw top standard opening vial; Screw cap, 8mm black polypropylene with PTFE/silicone septa	100/pk	392611531	OEM
Clear glass 2.0ml screw top standard opening vial; screw cap, 8mm black polypropylene with PTFE/butyl rubber septa	100/pk	392611826	OEM
Amber glass 2.0ml screw top standard opening vial; screw cap, 8mm black polypropylene with PTFE/butyl rubber septa	100/pk	392611827	OEM
Clear glass 2.0ml screw top standard opening vial; screw cap, 8mm black polypropylene with PTFE/silicone/PTFE septa	100/pk	392611537	OEM
Amber glass 2.0ml screw top standard opening vial; screw cap, 8mm black polypropylene with PTFE/silicone/PTFE septa	100/pk	392611538	OEM
Clear 2.0ml screw standard; 100µL Insert, conical point interior, no spring required; Cap, 8mm black polypropylene with PTFE/silicone septa	100/pk	392611533	OEM
Clear glass 2.0ml Silanized screw top standard opening vial; screw cap, 8mm black polypropylene with PTFE/silicone septa	100/pk	392611535	OEM
Amber glass 2.0ml Silanized screw top standard opening vial; screw cap, 8mm black polypropylene with PTFE/silicone septa	100/pk	392611833	OEM
Clear 2.0ml screw standard; 100µL Insert, conical point interior, no spring required; Cap, 8mm black polypropylene, PTFE/silicone/PTFE septa	100/pk	392611540	OEM
Clear 2ml screw standard; 100µL Insert, conical point interior, no spring required; Cap, 8mm black polypropylene with PTFE/butyl rubber septa	100/pk	392611829	OEM
Clear glass 2.0ml Silanized screw top standard opening vial; screw cap, 8mm black polypropylene with PTFE/butyl rubber septa	100/pk	392611831	OEM
Clear 2.0ml screw standard; 100µL Insert polymer spring, conical precision point interior; Cap, 8mm black polypropylene, PTFE/silicone septa	100/pk	392611532	OEM
Amber 2.0ml screw standard; 100µL Insert polymer spring, conical precision point interior; Cap, 8mm black polypropylene, PTFE/silicone septa	100/pk	392611534	OEM
Clear 2ml screw standard; 100µL Insert polymer spring, conical precision point interior; Cap, 8mm black polypropylene, PTFE/butyl rubber septa	100/pk	392611828	OEM
Amber 2ml screw standard; 100µL Insert polymer spring, conical precision point interior; Cap, 8mm black polypropylene, PTFE/butyl rubber septa	100/pk	392611830	OEM
Clear 2.0ml screw standard; 100µL Insert polymer spring, conical precision point interior; Cap, 8mm black polypropylene, PTFE/silicone/PTFE septa	100/pk	392611539	OEM
Amber 2.0ml screw standard; 100µL Insert polymer spring, conical precision point interior; Cap, 8mm black polypropylene, PTFE/silicone/PTFE septa	100/pk	392611541	OEM
Clear 2.0ml screw standard; 100µL Silanized Insert polymer spring, conical precision point interior; Cap, 8mm black polypropylene, PTFE/silicone septa	100/pk	392611536	OEM
Clear 2ml screw standard; 100µL Silanized polymer spring, conical precision point interior; Cap, 8mm black polypropylene, PTFE/butyl rubber septa	100/pk	392611832	OEM



Convenience Kits - 144/Pack

- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray
- 8-425 Black Screw caps
- Post baked Teflon/silicone septa for increased performance



Description	Qty	Part#	Price \$
Clear glass 2.0ml screw top standard opening Vial; screw Cap, 8mm black polypropylene with red PTFE/silicone septa	144/pk	394983500	OEM
Clear glass 2.0ml screw top standard opening Vial; screw Cap, 8mm black polypropylene with red PTFE/silicone septa	12 Packs of 144	394983501	OEM
Clear glass 2.0ml screw top standard opening Vial; screw Cap, 8mm white polypropylene with red PTFE/silicone septa	144/pk	392604210	OEM



12 x 32 mm, 2ml, 8-425 Screw Top Standard Opening Glass Vials

- 8mm screw thread design
- Post baked Teflon/silicone septa for increased performance
- Compatible with most autosamplers
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray
- Caps, septa, microvolume inserts and silane treated vials available



Description	Qty	Part#	Price \$
Clear glass 2.0ml screw top standard opening vials	144/pk	6600010400	OEM
Clear glass 2.0ml screw top standard opening vial	100/pk	392611639	OEM
Clear glass 2.0ml screw top standard opening vial, silanized	100/pk	392611642	OEM
Amber glass 2.0ml screw top standard opening vials	144/pk	99668900	OEM
Amber glass 2.0ml screw top standard opening vial	100/pk	392611640	OEM
Amber glass 2.0ml screw top standard opening vial, silanized	100/pk	392611643	OEM



8-425 Screw Caps With Septa

- Sure-sealing polypropylene caps
- Convenient, clean pre-inserted septa
- Four septa to choose from



Description	Qty	Part#	Price \$
8mm screw cap, black polypropylene with red PTFE silicone Septa	144/pk	99778800	OEM
8mm screw caps, black polypropylene with PTFE/butyl rubber Septa	100/pk	392611645	OEM
8mm screw caps, black polypropylene with PTFE Silicone Septa	100/pk	392611641	OEM
8mm screw caps, black polypropylene with PTFE/Silicone/PTFE Septa	100/pk	392611644	OEM



8mm Black Polypropylene Screw Caps

- Screw Open Hole Cap
- Inert Polypropylene
- Use with 8mm Septa



Description	Qty	Part#	Price \$
Screw Cap, 8mm black polypropylene	144/pk	1600069800	OEM



8mm Teflon/Silicone Septa

- Fits Standard opening caps
- Post baked Teflon/silicone septa for increased performance



Description	Qty	Part#	Price \$
Septa, 8mm red Teflon/silicone	144/pk	6900016900	OEM
Septa, 8mm blue Teflon/silicone	144/pk	390614901	OEM



Microvolume 100µL Glass Inserts for 12 x 32 mm 2 mL Standard Opening Vials

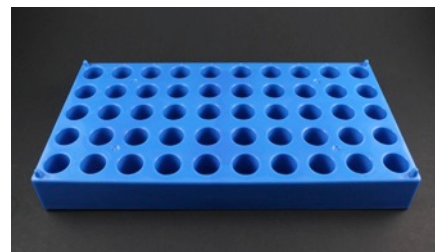
- 100µL inserts
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
100µL glass Inserts , conical point interior, no spring required	100/pk	392611593	OEM
	1000/pk	392611593-10	OEM
100µL glass Inserts with polymer spring, conical with precision point interior	100/pk	392611591	OEM
	1000/pk	392611591-10	OEM
100µL Silanized glass Inserts , conical point interior, no spring required	100/pk	392611856	OEM
	1000/pk	392611856-10	OEM
100µL Silanized glass Inserts with polymer spring, conical with precision point interior	100/pk	392611592	OEM
	1000/pk	392611592-10	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM
	5/pk	392611517-5	

Polypropylene Gridded Vial Storage Box

- Holds (100) 12 x 32 mm vials
- Hinged lid w/ secure snap closure
- Alpha-Numeric numbers/letters on grids for easy sample ID
- Clear polypropylene for easy identification
- Stackable w/ writing panel on lid front for ID
- Rugged, compact design, and raised edges for non-slip storage
- Rated at -90°C for freezer storage



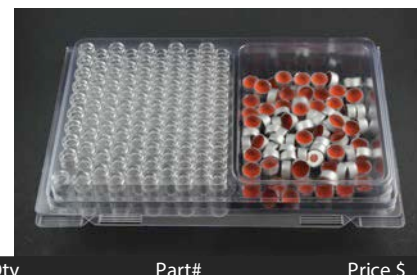
Description	Qty	Part No.	Price \$
Polypropylene Gridded Vial Storage Box	5/pk	50001	OEM

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12 x 32 mm, 2ml Crimp Top Standard Opening Glass Vial Kits

- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray
- 11mm aluminum open hole crimp caps
- Post baked Teflon/silicone septa for increased performance



Description	Qty	Part#	Price \$
Clear glass 2.0ml crimp top standard opening vial; Crimp cap, 11mm silver aluminum with PTFE/red rubber septa	100/pk	392611501	OEM
Amber glass 2.0ml crimp top standard opening vial; Crimp cap, 11mm silver aluminum with PTFE/red rubber septa	100/pk	392611502	OEM
Clear glass 2.0ml crimp top standard opening vial; crimp cap, 11mm silver aluminum with PTFE/butyl rubber septa	100/pk	392611810	OEM
Amber glass 2.0ml crimp top standard opening vial; crimp cap, 11mm silver aluminum with PTFE/butyl rubber septa	100/pk	392611811	OEM
Clear glass 2.0ml crimp top standard opening vial; crimp cap, 11mm silver aluminum with PTFE/silicone septa	100/pk	392611508	OEM
Amber glass 2.0ml crimp top standard opening vial; crimp cap, 11mm silver aluminum with PTFE/silicone septa	100/pk	392611509	OEM
Clear glass 2.0ml Silanized crimp top standard opening vial; crimp cap, 11mm silver aluminum with PTFE/red rubber septa	100/pk	392611506	OEM
Clear 2.0ml crimp standard; 100µL Inserts, conical point interior, no spring required; Cap, 11mm silver aluminum with PTFE/red rubber septa	100/pk	392611504	OEM
Amber glass 2.0ml Silanized crimp top standard opening vial; crimp cap, 11mm silver aluminum with PTFE/red rubber septa	100/pk	392611817	OEM
Clear glass 2.0ml Silanized crimp top standard opening vial; crimp cap, 11mm silver aluminum with PTFE/butyl rubber septa	100/pk	392611815	OEM
Clear 2.0ml crimp standard; 100µL Inserts, conical point interior, no spring required; Cap, 11mm silver aluminum with PTFE/butyl rubber septa	100/pk	392611813	OEM
Clear 2.0ml crimp standard; 100µL Inserts, conical point interior, no spring required; Cap, 11mm silver aluminum, PTFE/silicone septa	100/pk	392611511	OEM
Clear 2.0ml crimp standard; 100µL Inserts polymer spring, conical precision point interior; Cap, 11mm silver aluminum, PTFE/red rubber septa	100/pk	392611503	OEM
Amber 2.0ml crimp standard; 100µL Inserts polymer spring, conical precision point interior; Cap, 11mm silver aluminum, PTFE/red rubber septa	100/pk	392611505	OEM
Clear 2.0ml crimp standard; 100µL Inserts polymer spring, conical precision point interior; Cap, 11mm silver aluminum, PTFE/butyl rubber septa	100/pk	392611812	OEM



12 x 32 mm, 2ml Crimp Top Standard Opening Glass Vial Kits (Continued)

Description	Qty	Part#	Price \$
Amber 2 ml crimp standard; 100µL Inserts polymer spring, conical precision point interior; Cap, 11mm silver aluminum, PTFE/butyl rubber septa	100/pk	392611814	OEM
Clear 2.0ml crimp standard; 100µL Inserts polymer spring, conical precision point interior; Cap, 11mm silver aluminum, PTFE/silicone septa	100/pk	392611510	OEM
Amber 2.0ml crimp standard; 100µL Inserts polymer spring, conical precision point interior; Cap, 11mm silver aluminum, PTFE/silicone septa	100/pk	392611512	OEM
Clear 2.0ml crimp standard; 100µL Silanized Inserts polymer spring, conical precision point interior; Cap, 11mm silver aluminum, PTFE/red rubber septa	100/pk	392611507	OEM
Clear 2.0ml crimp standard; 100µL Silanized Inserts polymer spring, conical precision point interior; Cap, 11mm silver aluminum, PTFE/butyl rubber septa	100/pk	392611816	OEM



12 x 32 mm, 2ml Crimp Top Standard Opening Glass Vials

- Standard opening. Compatible with most autosamplers
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass. Packaged in one-piece clamshell tray
- 11mm aluminum open hole crimp caps available



Description	Qty	Part#	Price \$
Clear glass 2.0ml crimp top standard opening vial	100/pk	392611626	OEM
Clear glass 2.0ml crimp top standard opening vial, Silanized	100/pk	392611630	OEM
Amber glass 2.0ml crimp top standard opening vial	100/pk	392611628	OEM
Amber glass 2.0ml crimp top standard opening vial, Silanized	100/pk	392611629	OEM



11mm Aluminum Crimp Caps with Septa

- Crimp-tight aluminum caps
- Convenient, clean pre-installed septa
- Three septa to choose from



Description	Qty	Part#	Price \$
11mm Crimp Cap, aluminum PTFE/Red rubber septa	100/pk	392611627	OEM
11mm Crimp Cap, aluminum PTFE/Butyl rubber septa	100/pk	392611632	OEM
11mm Crimp Cap, aluminum PTFE/Silicone septa	100/pk	392611631	OEM
11mm Crimp Cap, aluminum with PTFE/Red rubber septa	144/pk	99779701	OEM



11mm Colored Crimp Caps w/ Septa

- Crimp tight aluminum caps
- Five colors of caps for easy identification



Description	Qty	Part No.	Price \$
11mm crimp cap, aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627 392611627-10	OEM
11mm crimp cap, gold aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627GD 392611627GD-10	OEM
11mm crimp cap, blue aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627B 392611627B-10	OEM
11mm crimp cap, green aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627G 392611627G-10	OEM
11mm crimp cap, red aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627R 392611627R-10	OEM



Microvolume Glass Inserts for 12 x 32 mm 2 mL Standard Opening Vials

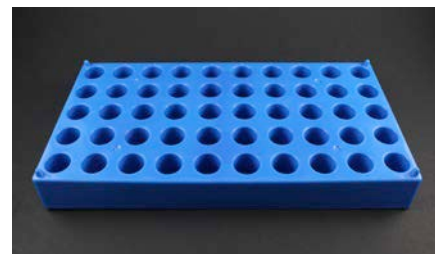
- 100µL inserts
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
100µL glass Inserts , conical point interior, no spring required	100/pk 1000/pk	392611593 392611593-10	OEM
100µL glass Inserts with polymer spring, conical with precision point interior	100/pk 1000/pk	392611591 392611591-10	OEM
100µL Silanized glass Inserts , conical point interior, no spring required	100/pk 1000/pk	392611856 392611856-10	OEM
100µL Silanized glass Inserts with polymer spring, conical with precision point interior	100/pk 1000/pk	392611592 392611592-10	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM
	5/pk	392611517-5	

Polypropylene Gridded Vial Storage Box

- Holds (100) 12 x 32 mm vials
- Hinged lid w/ secure snap closure
- Alpha-Numeric numbers/letters on grids for easy sample ID
- Clear polypropylene for easy identification
- Stackable w/ writing panel on lid front for ID
- Rugged, compact design, and raised edges for non-slip storage
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Gridded Vial Storage Box	5/pk	50001	OEM

11 mm Crimper & Decapper

- Easy to use
- Adjustable crimping depth
- Permits minor handle pressure
- Decapper removes crimped seals from vials



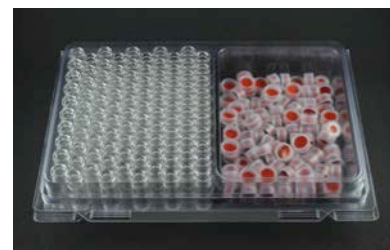
Description	Qty	Part#	Price \$
Hand Crimper for 11mm Crimp Caps	1/pk	AL666011	OEM
Hand Decapper for 11mm Crimp Caps	1/pk	AL98711	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.



12 x 32 mm, 2ml Snap Top Wide Opening Glass Vial Kits

- 40% larger opening.
- Reduces the chance of bent or broken needles.
- Lot to lot quality assurance with lot number coding.
- Type 1 borosilicate glass.
- Packaged in a sturdy, easy open, one piece clamshell tray.



Description	Qty	Part#	Price \$
Clear glass 2.0ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/red rubber septa	100/pk	392611566	OEM
Amber glass 2.0ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/red rubber septa	100/pk	392611567	OEM
Clear glass 2.0ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with pre-slit blue PTFE/silicone septa	100/pk	392611579	OEM
Clear glass 2.0ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/silicone septa	100/pk	392611573	OEM
Clear glass 2.0ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/butyl rubber septa	100/pk	392611839	OEM
Amber glass 2.0ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/silicone septa	100/pk	392611574	OEM
Clear glass 2.0ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/silicone/PTFE septa	100/pk	392611570	OEM
Amber glass 2.0ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/butyl rubber septa	100/pk	392611840	OEM
Amber glass 2.0ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/silicone/PTFE septa	100/pk	392611571	OEM
Clear glass 2.0ml Silanized snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/silicone septa	100/pk	392611577	OEM
Clear 2.0ml snap top wide; 200µL Glass Insert, conical point interior, no spring required; Cap, 11mm natural polyethylene with PTFE/red rubber septa	100/pk	392611569	OEM
Clear glass 2.0ml Silanized snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/butyl rubber septa	100/pk	392611843	OEM
Amber glass 2.0ml Silanized snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/silicone septa	100/pk	392611861	OEM
Clear 2.0ml snap top wide; 200µL Glass Insert, conical point interior, no spring required; Snap cap, 11mm natural polyethylene with PTFE/silicone septa	100/pk	392611576	OEM
Clear 2.0ml snap top wide; 200µL Glass Insert, conical point interior, no spring required; Cap, 11mm natural polyethylene, PTFE/butyl rubber septa	100/pk	392611842	OEM
Clear 2.0ml snap top wide; 200µL Glass Insert polymer spring, conical precision mandrel interior; Cap, 11mm natural polyethylene with PTFE/red rubber septa	100/pk	392611568	OEM



12 x 32 mm, 2ml Snap Top Wide Open Glass Vial Kits (Continued)

Description	Qty	Part#	Price \$
Clear 2.0ml snap top wide; 200µL Glass Insert polymer spring, conical precision mandrel interior; Cap, 11mm natural polyethylene, PTFE/silicone septa	100/pk	392611575	OEM
Clear 2.0ml snap top wide; 200µL Glass Insert polymer spring, conical precision mandrel interior; Cap, 11mm natural polyethylene, PTFE/butyl rubber septa	100/pk	392611841	OEM
Clear 2.0ml snap top wide; 200µL Glass Insert polymer spring, conical precision mandrel interior; Cap, 11mm natural polyethylene, PTFE/silicone/PTFE septa	100/pk	392611572	OEM
Clear 2.0ml snap top wide; 200µL Silanized Glass Insert polymer spring, conical precision mandrel interior; Cap, 11mm natural polyethylene, PTFE/silicone septa	100/pk	392611578	OEM
Clear 2.0ml snap top wide; 200µL Silanized Insert polymer spring, conical precision mandrel interior; Cap, 11mm natural polyethylene, PTFE/butyl rubber septa	100/pk	392611844	OEM



11mm Snap Top Caps with Septa

- Snap-tight polyethylene Snap Top Caps
- Convenient, clean pre-installed septa
- Five septa to choose from



Description	Qty	Part#	Price \$
Snap Top Caps, 11mm natural polyethylene with PTFE/red rubber septa	100/pk	392611871	OEM
Snap Top Caps, 11mm natural polyethylene with PTFE/sil/PTFE septa	100/pk	392611872	OEM
Snap Top Caps, 11mm natural polyethylene with PTFE/silicone septa	100/pk	392611873	OEM
Snap Top Caps, 11 mm natural polyethylene with pre-slit blue PTFE/sil septa	100/pk	392611874	OEM
Snap Top Caps, 11mm natural polyethylene with butyl rubber septa	100/pk	392611875	OEM



Microvolume 200µL Glass Inserts for 12 x 32 mm 2mL Wide Opening Vials

- 200µL inserts, Type 1 borosilicate glass
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts



Description	Qty	Part#	Price \$
200µL Glass Insert, conical point interior, no spring required	100/pk	392611596	OEM
	1000/pk	392611596-10	
200µL Silanized Glass Insert, conical 4 point interior, no spring required	100/pk	392611855	OEM
	1000/pk	392611855-10	
200µL Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611594	OEM
	1000/pk	392611594-10	
200µL Silanized Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611595	OEM
	1000/pk	392611595-10	



12 x 32 mm, 2ml, 10-425 Screw Top Wide Opening Glass Vial Kits

- 10-425 thread cap allows vial to hang from autosampler tray
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one piece clamshell tray



Description	Qty	Part#	Price \$
Clear glass 2.0ml screw top wide opening vial; Screw cap, 10mm red polypropylene with PTFE/silicone/PTFE septa	100/pk	392611562	OEM
Amber glass 2.0ml screw top wide opening vial; Screw cap, 10mm red polypropylene with PTFE/silicone/PTFE septa	100/pk	392611563	OEM
Clear 2.0ml screw top wide; 200µL Insert, conical point interior, no spring required; Cap, 10mm red polypropylene with PTFE/silicone/PTFE septa	100/pk	392611565	OEM
Clear 2.0ml screw top wide; 200µL Insert polymer spring, conical precision mandrel interior; Cap, 10mm red polypropylene, PTFE/silicone/PTFE septa	100/pk	392611564	OEM
Clear glass 2.0ml screw top wide opening vial; Screw cap, 10mm white polypropylene with PTFE/silicone septa	100/pk	392611556	OEM
Clear glass 2.0ml screw top wide opening vial; Screw cap, 10mm white polypropylene with PTFE/butyl rubber septa	100/pk	392611845	OEM
Amber glass 2.0ml screw top wide opening vial; Screw cap, 10mm white polypropylene with PTFE/silicone septa	100/pk	392611557	OEM
Amber glass 2.0ml screw top wide opening vial; Screw cap, 10mm white polypropylene with PTFE/butyl rubber septa	100/pk	392611846	OEM
Clear glass 2.0ml Silanized screw top wide opening vial; Screw cap, 10mm white polypropylene with PTFE/silicone septa	100/pk	392611560	OEM
Clear glass 2.0ml Silanized screw top wide opening vial; Screw cap, 10mm white polypropylene with PTFE/butyl rubber septa	100/pk	392611849	OEM
Clear 2.0ml screw top wide; 200µL Insert, conical point interior, no spring required; Screw cap, 10mm white polypropylene, PTFE/silicone septa	100/pk	392611559	OEM
Clear 2.0ml screw top wide; 200µL Insert, conical point interior, no spring required; Cap, 10mm white polypropylene with PTFE/butyl rubber septa	100/pk	392611848	OEM
Amber glass 2.0ml Silanized screw top wide opening vial; Screw cap, 10mm white polypropylene with PTFE/silicone septa	100/pk	392611851	OEM
Clear 2.0ml screw top wide; 200µL Insert polymer spring, conical precision mandrel interior; Cap, 10mm white polypropylene, PTFE/silicone septa	100/pk	392611558	OEM
Clear 2.0ml screw wide; 200µL Glass insert polymer spring, conical precision mandrel interior; Cap, 10mm white polypropylene, PTFE/butyl rubber septa	100/pk	392611847	OEM
Clear 2.0ml screw top wide; 200µL Silanized Insert polymer spring, conical precision mandrel interior; Cap, 10mm white polypropylene, PTFE/sil. septa	100/pk	392611561	OEM
Clear 2ml screw wide; 200µL Silanized Insert polymer spring, conical precision mandrel interior; Cap 10mm white polypropylene, PTFE/butyl rubber septa	100/pk	392611850	OEM



12 x 32 mm, 2ml, 10-425 Screw Top Wide Opening Glass Vial Kit w/ Caps & Polypropylene Hinged Box (Assembled)

- 10-425 mm threaded cap (pre-installed on vials)
- Type 1 borosilicate glass
- Clear Rugged Polypropylene Case Holds 100 12 x 32mm Vials
- Alpha-Numeric Numbers and Letters on Grids of Case for Easy Sample ID
- Case is Stackable with Writing Panel on Lid Front for ID
- Case is Ideal for Laboratory and Freezer Storage – Rated at -90 ° C



Description	Qty	Part#	Price \$
Clear glass 2.0ml screw top wide opening vial: Screw cap, 10mm red polypropylene with PTFE/silicone septa. Caps are screwed onto vials & placed in clear polypropylene hinged storage box	100/pk 1000/pk	190010205 190010205-10	OEM



12 x 32 mm, 2ml, 10-425 Screw Top Wide Opening Glass Vials

- Wide opening 40% more area for reliable needle penetration
- Compatible with most autosamplers
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray
- Silane treated vials and inserts available for polar compounds i.e., amines, pesticides, phenols, proteins, etc.
- 10-425 screw caps and septa available



Description	Qty	Part#	Price \$
Clear glass 2.0ml screw top wide opening vial	100/pk	392611646	OEM
Clear glass 2.0ml screw top wide opening vial, silanized	100/pk	392611648	OEM
Amber glass 2.0ml screw top wide opening vial	100/pk	392611656	OEM
Amber glass 2.0ml screw top wide opening vial, silanized	100/pk	392611649	OEM



10-425 Screw Top Caps With Septa

- Sure-sealing polypropylene caps
- Convenient, clean pre-inserted septa
- Three septa to choose from



Description	Qty	Part#	Price \$
Screw top cap, 10mm red polypropylene with PTFE/Silicone/PTFE septa	100/pk	392611652	OEM
Screw top cap, 10mm white polypropylene with PTFE/butyl rubber septa	100/pk	392611651	OEM
Screw top cap, 10mm white polypropylene with PTFE/silicone septa	100/pk	392611650	OEM



Microvolume 200µL Glass Inserts for 12 x 32 mm 2mL Wide Opening Vials

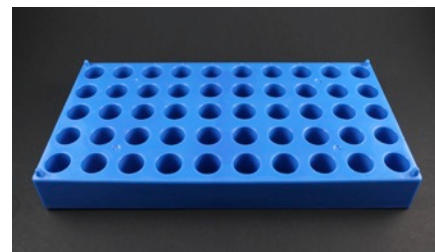
- 200µL inserts
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
200µL Glass Insert, conical point interior, no spring required	100/pk	392611596	OEM
	1000/pk	392611596-10	OEM
200µL Silanized Glass Insert, conical 4 point interior, no spring required	100/pk	392611855	OEM
	1000/pk	392611855-10	OEM
200µL Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611594	OEM
	1000/pk	392611594-10	OEM
200µL Silanized Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611595	OEM
	1000/pk	392611595-10	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM
	5/pk	392611517-5	OEM

Polypropylene Gridded Vial Storage Box

- Holds (100) 12 x 32 mm vials
- Hinged lid w/ secure snap closure
- Alpha-Numeric numbers/letters on grids for easy sample ID
- Clear polypropylene for easy identification
- Stackable w/ writing panel on lid front for ID
- Rugged, compact design, and raised edges for non-slip storage
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Gridded Vial Storage Box	5/pk	50001	OEM



12 x 32 mm Polypropylene Crimp Top Vial Kits

- Unassembled convenience kits offer the vials and seals packaged together for ease of use and storage.
- The kits contain vials and 11mm aluminum seals with Teflon/rubber septa
- Chemically resistant polypropylene vials are an economical alternative for microsampling instead of using limited volume inserts
- Ideal for sodium analysis or pH sensitive samples
- Precision formed interior profile minimizes residual sample volume



Description	Qty	Part#	Price \$
Vial Kit, 0.25mL Polypropylene crimp top Vial, pulled point interior; 11mm Aluminum Seal w/ Teflon/rubber septum	100/pk	SN500588	OEM
Vial Kit, 0.30mL Polypropylene crimp top vial, conical formed interior, 11mm Aluminum Seal w/ Teflon/rubber septum	100/pk	SN200080	OEM
Vial Kit, 0.50mL Polypropylene crimp top vial, tapered interior profile, 11mm Aluminum seal w/ Teflon/rubber septum	100/pk	SN200082	OEM



12 x 32 mm Polypropylene Crimp Top Vials

- Chemically resistant polypropylene vials are an economical alternative for microsampling instead of using limited volume inserts
- Ideal for sodium analysis or pH sensitive samples
- Vials have a standard 11mm aluminum seal finish allowing use with 11 mm aluminum seals or snap caps
- Precision formed interior profile minimizes residual sample volume



Description	Qty	Part#	Price \$
100µL crimp top Polypropylene vials	100/pk	392611666	OEM
0.25mL Polypropylene Vial; Crimp top; pulled point interior profile	100/pk	SN200050	OEM
0.30mL Polypropylene Vial; Crimp Top; Conical bottom Interior	100/pk	SN500106	OEM
0.50mL Polypropylene Vial; Crimp top; tapered interior	100/pk	SN500112	OEM
750µL crimp top Polypropylene vials	100/pk	392611667	OEM



11mm Aluminum Crimp Caps with Septa

- Crimp-tight aluminum caps
- Convenient, clean pre-installed septa
- Three septa to choose from



Description	Qty	Part#	Price \$
11mm Crimp Cap, aluminum PTFE/Red rubber septa	100/pk	392611627	OEM
11mm Crimp Cap, aluminum PTFE/Butyl rubber septa	100/pk	392611632	OEM
11mm Crimp Cap, aluminum PTFE/Silicone septa	100/pk	392611631	OEM
11mm Crimp Cap, aluminum with PTFE/Red rubber septa	144/pk	99779701	OEM



11mm Colored Crimp Caps w/ Septa

- Crimp tight aluminum caps
- Five colors of caps for easy identification



Description	Qty	Part No.	Price \$
11mm crimp cap, aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627 392611627-10	OEM
11mm crimp cap, gold aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627GD 392611627GD-10	OEM
11mm crimp cap, blue aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627B 392611627B-10	OEM
11mm crimp cap, green aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627G 392611627G-10	OEM
11mm crimp cap, red aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	392611627R 392611627R-10	OEM

11 mm Crimper & Decapper

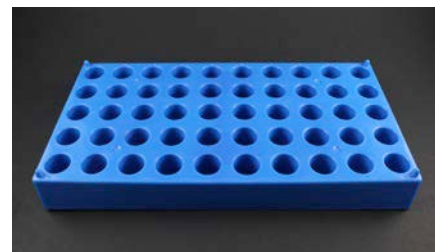
- Easy to use
- Adjustable crimping depth
- Permits minor handle pressure
- Decapper removes crimped seals from vials



Description	Qty	Part#	Price \$
Hand Crimper for 11mm Crimp Caps	1/pk	AL666011	OEM
Hand Decapper for 11mm Crimp Caps	1/pk	AL98711	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM
	5/pk	392611517-5	

Polypropylene Gridded Vial Storage Box

- Holds (100) 12 x 32 mm vials
- Hinged lid w/ secure snap closure
- Alpha-Numeric numbers/letters on grids for easy sample ID
- Clear polypropylene for easy identification
- Stackable w/ writing panel on lid front for ID
- Rugged, compact design, and raised edges for non-slip storage
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Gridded Vial Storage Box	5/pk	50001	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.



12x32mm Polypropylene Screw Top Vial Kits

- Unassembled convenience kits are provided with caps and septa pre-assembled
- Caps with septa are provided in an adjacent well
- Chemically resistant polypropylene vials are an economical alternative for microsampling instead of limited volume inserts
- Ideal for sodium analysis or pH sensitive samples
- Vials have a standard 8-425 GPI thread finish
- Precision formed interior profile minimizes residual sample volume



Description	Qty	Part#	Price \$
Vial Kit, 0.25mL Polypropylene Screw top vial, pulled point interior, 8-425 Black polypropylene closure with assembled 0.060" red Teflon/silicone	100/pk	SN200084	OEM
Vial Kit, 0.30mL Polypropylene screw top vial, conical formed interior, 8-425 black polypropylene closure with assembled 0.060" red Teflon/silicone	100/pk	SN200086	OEM
Vial Kit, 0.50mL Polypropylene screw top vial, conical formed interior, 8-425 black polypropylene closure with assembled 0.060" red Teflon/silicone	100/pk	SN200088	OEM



12x32mm Polypropylene Screw Top Vials

- Chemically resistant polypropylene vials are an economical alternative for microsampling instead of using limited volume inserts
- Ideal for sodium analysis or pH sensitive samples
- Vials have a standard 8-425 GPI thread finish
- Precision formed interior profile minimizes residual sample volume



Description	Qty	Part#	Price \$
100µL screw top Polypropylene vials	100/pk	392611665	OEM
0.25mL Polypropylene Vial; Screw thread; pulled-point interior profile	100/pk	SN200268	OEM
0.30mL Polypropylene Vial; Screw thread; conical bottom interior	100/pk	SN500118	OEM
0.50mL Polypropylene Vial; Screw thread; tapered interior	100/pk	SN500124	OEM



8mm Black Polypropylene Screw Caps

- Screw Open Hole Cap
- Inert Polypropylene
- Use with 8mm Septa



Description	Qty	Part#	Price \$
Screw Cap, 8mm black polypropylene, Cap Only	144/pk	1600069800	OEM



8mm Teflon/Silicone Septa

- Fits Standard opening caps
- Post baked Teflon/silicone septa for increased performance



Description	Qty	Part#	Price \$
Septa, 8mm red Teflon/silicone	144/pk	6900016900	OEM
Septa, 8mm blue Teflon/silicone	144/pk	390614901	OEM



8-425 Screw Caps With Septa

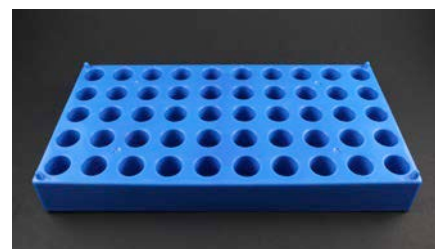
- Sure-sealing polypropylene caps
- Convenient, clean pre-inserted septa
- Four septa to choose from



Description	Qty	Part#	Price \$
8mm screw cap, black polypropylene with red PTFE silicone Septa	144/pk	99778800	OEM
8mm screw caps, black polypropylene with PTFE/butyl rubber Septa	100/pk	392611645	OEM
8mm screw caps, black polypropylene with PTFE Silicone Septa	100/pk	392611641	OEM
8mm screw caps, black polypropylene with PTFE/Silicone/PTFE Septa	100/pk	392611644	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM
	5/pk	392611517-5	

Polypropylene Gridded Vial Storage Box

- Holds (100) 12 x 32 mm vials
- Hinged lid w/ secure snap closure
- Alpha-Numeric numbers/letters on grids for easy sample ID
- Clear polypropylene for easy identification
- Stackable w/ writing panel on lid front for ID
- Rugged, compact design, and raised edges for non-slip storage
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Gridded Vial Storage Box	5/pk	50001	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

12 x 32 mm, 2ml Shell Glass Vial Kits

- Large opening
- Improved autosampler needle accuracy & handling
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one piece clamshell tray
- Economical alternative to screw top and crimp top vials
- Push-in polyethylene cap with thin molded center
- Cap has centering holder for 300µL inserts
- Easy transfer of samples. Fits most autosampler systems



Description	Qty	Part#	Price \$
Clear glass 2.0ml shell Vial; Polyethylene clear push-in caps with centering holder for insert	100/pk	392611580	OEM
Clear glass 2.0ml shell Vial; 300µL glass Insert; Polyethylene clear push-in caps with centering holder for insert	100/pk	392611581	OEM

Shell Glass Vials, Inserts & Caps

- Items sold individually
- Large opening; Type 1 borosilicate glass Vials
- Improved autosampler needle accuracy & handling
- Economical alternative to screw top and crimp top vials
- Push-in polyethylene cap with thin molded center
- Cap has centering holder for 300µL inserts
- Fits most autosampler systems



Description	Qty	Part#	Price \$
2.0ml shell glass vials	100/pk	392611662	OEM
300µL glass insert for shell vials	100/pk	392611664	OEM
Push-in caps with centering holder for insert, polyethylene	100/pk	392611663	OEM



8 x 40mm, 1ml Push-In Cap, Glass and Polypropylene Vial Kits

- Fits Waters 96 position tray
- Designed for best seal
- Push in cap for easy seal
- Lot to lot quality assurance with lot number coding
- Aqueous sample compatibility
- Caps have 0.01" center for easy needle penetration
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
Polypropylene 0.7ml limited volume vial; One piece natural polyethylene cap	250/pk	392611599	OEM
Clear glass 1.0ml push-in cap, shell vial; 150µL glass limited volume insert with compression spring; One piece natural polyethylene cap	250/pk	392611598	OEM
Clear glass 1.0ml push-in cap, shell vial; One piece natural polyethylene cap	250/pk	392611597	OEM



15 x 45 mm, 4ml Screw Top Glass Vial Kits

- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Use with: Bruker LC51; Gilson, Kontron MSI 660; Perkin Elmer Autosystem; Phillips LC-XP; Shimadzu AOC-14/1400, SIL-2AS, LC-10A; Spark Marathon; TosoH TSK-6080; Waters 48-Position, 717



Description	Qty	Part#	Price \$
Clear glass, 4ml screw top vial; screw cap, 13mm black polypropylene with 10 mil white virgin PTFE septa	100/pk	392611604	OEM
Amber glass, 4ml screw top vial; screw cap, 13mm black polypropylene with 10 mil white virgin PTFE septa	100/pk	392611605	OEM
Clear glass, 4ml screw top vial; screw cap, 13mm black polypropylene with PTFE/Silicone septa	100/pk	392611601	OEM
Clear glass, 4ml screw top vial; screw cap, 13mm black polypropylene with PTFE/butyl rubber septa	100/pk	392611852	OEM
Amber glass, 4ml screw top vial; screw cap, 13mm black polypropylene with PTFE/Silicone septa	100/pk	392611602	OEM
Amber glass, 4ml screw top vial; screw cap, 13mm black polypropylene with PTFE/butyl rubber septa	100/pk	392611853	OEM
Clear glass, 4ml screw top vial; 300µL glass insert w/ compression spring; Screw cap, 13mm black polypropylene with 10 mil white virgin PTFE septa	100/pk	392611606	OEM
Clear glass, 4ml screw top vial; 300µL Glass insert w/ compression spring; Screw cap, 13mm black polypropylene with PTFE/Silicone septa	100/pk	392611603	OEM
Clear glass, 4ml screw top vial; 300µL Glass insert w/ compression spring; Screw cap, 13mm black polypropylene with PTFE/butyl rubber septa	100/pk	392611854	OEM



15 x 45 mm, 4ml Screw Top Glass Vials

- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Use with: Bruker LC51; Gilson, Kontron MSI 660; Perkin Elmer Autosystem; Phillips LC-XP; Shimadzu AOC-14/1400, SIL-2AS, LC-10A; Spark Marathon; TosoH TSK-6080; Waters 48-Position, 717



Description	Qty	Part#	Price \$
4ml Clear Glass Screw Top Vials	100/Pk	392611604V	OEM
4ml Amber Glass Screw Top Vials	100/Pk	362611605AV	OEM



13mm Screw Caps with Septa

- Sure-sealing polypropylene caps
- Convenient, clean pre-inserted septa
- Three septa to choose from



Description	Qty	Part#	Price \$
13mm screw cap, black polypropylene with red PTFE silicone septa	100/Pk	362611604S	OEM
13mm screw cap, black polypropylene with orange PTFE/butyl rubber septa	100/Pk	362611604B	OEM
13mm screw cap, black polypropylene with 10 mil white virgin PTFE septa	100/Pk	362611604T	OEM



300µL Glass Insert for 15 x 45mm 4ml Vials

- 300µL inserts; Type 1 borosilicate glass
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position



Description	Qty	Part#	Price \$
300µL glass insert with compression spring	100/Pk	392611876	OEM

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Vial Septa Guide

Cap liners, also called vial septa, are selected according to the type of sample being analyzed. All vial septa contain small quantities of organic materials that might be detectable with the analytical instrumentation you are using. For most GC/MS and other high sensitivity detectors, we recommend the Ultra Sensitive GC/MS septum. It has very low levels of contaminants to minimize interference with the analysis, and has been qualified a major instrument manufacturer using GC/MS.

Chemical compatibility information is of a general nature, often measured by the degree of swelling and other effects the chemical has on the material, and should be used only as a guide. Compatibility within a chemical class can vary according to molecular weight of the solvent, and other factors. We recommend that you try different vial septa materials to determine the best one for your combination of sample type and analytical conditions.

Silicone is the most widely used material for vial septa. Our Ultra Sensitive GC/MS septa are specially prepared from silicone and PTFE materials to provide minimal septa contamination of the sample.

Butyl rubber/PTFE septa are used with ketones and acids, and where Silicone septa do not perform well.

Our silicone and butyl rubber septa, including Ultra Sensitive GC/MS septa, have a PTFE barrier layer to reduce the contact between the sample and septum materials.

Before the PTFE layer is punctured, the chemical compatibility properties of PTFE will determine the solvent compatibility. After puncture, the septa material will determine the compatibility.

Chemical	PTFE	Silicone	Butyl Rubber
Acids, concentrated	Excellent	Poor	Good
Acids, dilute	Excellent	Good	Excellent
Air and gas permeability	High	Moderate	Low
Alcohols	Excellent	Excellent	Good to excellent
Aliphatic hydrocarbons	Excellent	Poor	Poor
Alkalis	Excellent	Good to excellent	Good to excellent
Aromatic hydrocarbons	Excellent	Poor	Poor
Halogenated solvents	Excellent	Poor	Poor
Ketones	Excellent	Poor to good	Good to excellent
Water	Excellent	Excellent	Excellent

Once a vial septum has been penetrated by a needle, contamination on subsequent analyses can increase if sample components are able to extract chemicals from the vial septa. If contamination is apparent on the 2nd or later analyses from a vial, but is not apparent on the 1st analysis, you should use each vial for only one analysis.

Sample storage time and temperature before the analysis influence the extent that septa materials might be transferred into the sample. Good practice suggests shorter storage times and avoiding elevated storage temperatures. Also, volatile components can be lost with long storage times, even with the best vial septa available today.

GC/MS

Ultra Sensitive

Autosampler Vials

- ♦ Agilent
- ♦ Beckman
- ♦ Bruker
- ♦ Carlo Erba
- ♦ Chrompack
- ♦ CTC Analytics
- ♦ Dani
- ♦ Dynatech
- ♦ Gilson
- ♦ Hewlett Packard
- ♦ Hitachi
- ♦ Merck
- ♦ Perkin-Elmer
- ♦ Pharmacia
- ♦ Shimadzu
- ♦ Siemens
- ♦ Spark
- ♦ Spectra-Physics
- ♦ Thermo Scientific
- ♦ Varian

GC/MS Ultra Sensitive Vial Kits and Accessories

- We recommend our line of GC/MS Ultra High Sensitive Vials & accessories for GC/MS & other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- Septa, Caps, & Inserts packaged in Ultra Clean "Tested" Foil
- GC/MS Ultra High Sensitive septa are specially prepared from high purity silicone and ultra clean PTFE (Teflon) to provide ultra low levels of contaminants to minimize interference with the analysis
- Has been qualified by a Major Chromatography Company using State-Of-The-Art GC/MS technology
- Type 1 Borosilicate Glass
- Lot to lot quality assurance with lot number coding



2 mL Screw Top 9mm Wide Opening Vial Kits

- 100 vials & caps w/ pre-inserted septa per kit (10 Kits/Case)
- Packaged in Ultra Clean White Non-Plastic Trays
- For GC/MS and other highly sensitive detectors



Description	Qty	Part#	Price \$
Clear Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392611979	OEM
	1000/case	392620530	
Amber Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392612016	OEM
	100/pk	392612010	
	1000/case	392620531	



2 mL Screw Top 9mm Wide Opening Vial Kit w/ Fused 300µl Insert

- Packaged in Ultra Clean White Non-Plastic Trays
- For GC/MS and other highly sensitive detectors



Description	Qty	Part#	Price \$
Clear Glass Vials w/ Fused 300µl Insert & Pre-inserted Ultra GC/MS PTFE Septa	100/pk	392612001	OEM
Silanized Clear Glass Vials w/ Fused 300µl Insert & Pre-inserted Ultra GC/MS PTFE Septa	100/pk	392612004	OEM
Silanized Clear Glass Vials w/ Hanging 300µl Insert & Pre-inserted Ultra GC/MS PTFE Septa	100/pk	392612015	OEM



9 mm Red Polypropylene Caps with Septa Inserted

- Pre-inserted septa save time and reduce contamination
- Packaged in Ultra Clean "Tested" Foil
- GC/MS Ultra High Sensitive septa are specially prepared from high purity silicone and ultra clean PTFE (Teflon) to provide ultra low levels of contaminants to minimize interference with the analysis



Description	Qty	Part#	Price \$
9 mm Red Polypropylene Caps w/ Pre-inserted Ultra GC/MS/PTFE Septa	100/pk 1000/case	392620504 392620505	OEM



9 mm Septa

- For use in 9 mm screw caps
- Packaged in Ultra Clean "Tested" Foil
- For GC/MS & other highly sensitive detectors



Description	Qty	Part#	Price \$
9mm Ultra GC/MS/PTFE Septa	50/pk 100/pk 1000/case	392611985 392620508 392620509	OEM



12 x 32 mm, 2ml, 9mm Screw Top Wide Opening Glass Vials

- Packaged in Ultra Clean White Non-Plastic Trays
- For GC/MS and other highly sensitive detectors



Description	Qty	Part#	Price \$
Amber glass 2.0ml screw top wide opening vial	100/pk	392611654US	OEM
Clear glass 2.0ml screw top wide opening vial	100/pk	392611653US	OEM
Clear glass 2.0ml screw top wide opening vial, Silanized	100/pk	392611655US	OEM



Microvolume 200µl Glass Inserts for 12 x 32 mm 2mL Wide Opening

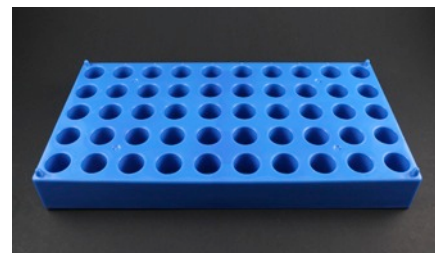
- Packaged in Ultra Clean "Tested" Foil
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
200µL Glass Insert, conical point interior, no spring required	100/pk	392611596US	OEM
	1000/pk	392611596-10US	
200µL Silanized Glass Insert, conical 4 point interior, no spring required	100/pk	392611855US	OEM
	1000/pk	392611855-10US	
200µL Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611594US	OEM
	1000/pk	392611594-10US	
200µL Silanized Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611595US	OEM
	1000/pk	392611595-10US	

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM

Ultra Sensitive Graphite Ferrule, 450°C

- Temperature Programmed Conditioning at 400°C
- Fifty Programmed Ramp Ups in GC oven
- Stable to 450°C
- High Density Graphite
- Smooth & Clean Edges - Better than Conventional Graphite Ferrules
- Packaged in "Ultra Clean" Glass Bottles with Special Yellow "Keep Clean" Label

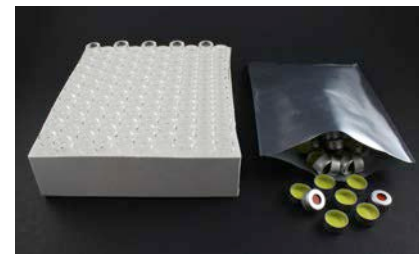


Description	Qty	Part#	Price \$
Ultra Sensitive 5mm Preconditioned Graphite Ferrules for Varian, Bruker & Agilent Chromatographs	2/pk	392534202	OEM
	10/pk	392534201	



2 mL Crimp Top Wide Opening Vial Kits

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- 40% larger opening reduces the chance of bent or broken needles
- Improved autosampler needle accuracy & handling
- Post baked Teflon/silicone septa for increased performance
- Type 1 borosilicate glass
- 11mm aluminum open hole crimp caps



Description	Qty	Part#	Price \$
Clear Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk 1000/case	392620515 392620540	OEM
Amber Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk 1000/case	392620516 392620541	OEM
Clear Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392612012	OEM



11 mm Crimp Caps with Septa Inserted

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean "Tested" Foil
- Pre-inserted septa save time and reduce contamination



Description	Qty	Part#	Price \$
11 mm Crimp Caps w/ Pre-inserted Ultra GC/MS/PTFE Septa	100/pk 1000/case	392620521 392620522	OEM



12 x 32 mm, 2ml Crimp Top Wide Opening Glass Vials

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays



Description	Qty	Part#	Price \$
Amber glass 2.0ml crimp top wide opening vial	100/pk	392611635US	OEM
Clear glass 2.0ml crimp top wide opening vial	100/pk	392611634US	OEM
Amber glass 2.0ml crimp top wide opening vial, silanized	100/pk	392611638US	OEM
Clear glass 2.0ml crimp top wide opening vial, silanized	100/pk	392611637US	OEM

11 mm Crimper & Decapper

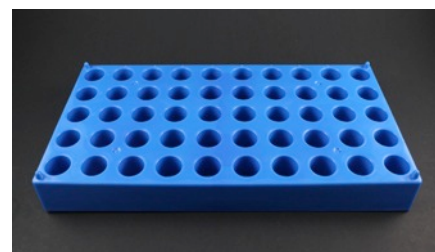
- Easy to use
- Adjustable crimping depth
- Permits minor handle pressure
- Decapper removes crimped seals from vials



Description	Qty	Part#	Price \$
Hand Crimper for 11mm Crimp Caps	1/pk	AL666011	OEM
Hand Decapper for 11mm Crimp Caps	1/pk	AL98711	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM

**Microvolume 200µl Glass Inserts for 12 x 32 mm 2mL Wide Opening Vials**

- Packaged in Ultra Clean "Tested" Foil
- For GC/MS and other highly sensitive detectors
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
200µL Glass Insert, conical point interior, no spring required	100/pk	392611596US	OEM
	1000/pk	392611596-10US	
200µL Silanized Glass Insert, conical 4 point interior, no spring required	100/pk	392611855US	OEM
	1000/pk	392611855-10US	
200µL Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611594US	OEM
	1000/pk	392611594-10US	
200µL Silanized Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611595US	OEM
	1000/pk	392611595-10US	



2 mL Snap Top Wide Opening Vial Kits

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- 40% larger opening reduces the chance of bent or broken needles
- Improved autosampler needle accuracy & handling
- Post baked Teflon/silicone septa for increased performance
- Type 1 borosilicate glass
- 11mm polyethylene open hole snap tops



Description	Qty	Part#	Price \$
Clear Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392620515US	OEM
	1000/case	392620540US	
Amber Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392620516US	OEM
	1000/case	392620541US	



11 mm Snap Tops with Septa Inserted

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean "Tested" Foil
- Pre-inserted septa save time and reduce contamination



Description	Qty	Part#	Price \$
11 mm Natural Polyethylene Cap w/ Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392611871US	OEM
	1000/pk	392611871-10US	



12 x 32 mm, 2ml Snap Top Wide Opening Glass Vials

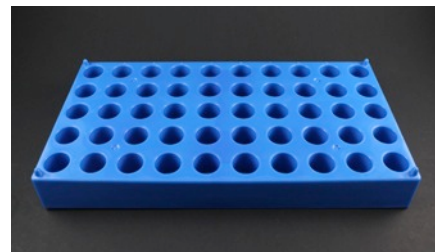
- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays



Description	Qty	Part#	Price \$
Amber glass 2.0ml snap top wide opening vial	100/pk	392611635US	OEM
Clear glass 2.0ml snap top wide opening vial	100/pk	392611634US	OEM
Amber glass 2.0ml snap top wide opening vial, silanized	100/pk	392611638US	OEM
Clear glass 2.0ml snap top wide opening vial, silanized	100/pk	392611637US	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM

**Microvolume 200µl Glass Inserts for 12 x 32 mm 2mL Wide Opening Vials**

- Packaged in Ultra Clean "Tested" Foil
- For GC/MS and other highly sensitive detectors
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
200µL Glass Insert, conical point interior, no spring required	100/pk	392611596US	OEM
	1000/pk	392611596-10US	
200µL Silanized Glass Insert, conical 4 point interior, no spring required	100/pk	392611855US	OEM
	1000/pk	392611855-10US	
200µL Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611594US	OEM
	1000/pk	392611594-10US	
200µL Silanized Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	392611595US	OEM
	1000/pk	392611595-10US	

Custom products & bulk pricing available. Email or fax us with your specifications for more information.



2 mL Screw Top Standard Opening Vial Kits, 8-425

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- Vials and caps with pre-inserted septa
- 8-425 Screw Caps



Description	Qty	Part#	Price \$
Clear Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392612022	OEM
	1000/pk	392612022-10	
Amber Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392612022-A	OEM
	1000/pk	392612022-A10	



8-425 Screw Caps w/ Septa

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean "Tested" Foil
- Pre-inserted septa save time and reduce contamination



Description	Qty	Part#	Price \$
8-425 Screw Caps w/ Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392612023	OEM
8-425 Screw Caps w/ Pre-inserted Ultra GC/MS/PTFE Septa	1000/case	392620557	OEM



8 mm Septa

- For use in 8-425 screw caps
- Packaged in Ultra Clean "Tested" Foil
- For GC/MS & other highly sensitive detectors



Description	Qty	Part#	Price \$
8mm Ultra GC/MS/PTFE Septa	100/pk	392612024	OEM
	1000/case	392620555	



12 x 32 mm, 2ml, 8-425 Screw Top Standard Opening Glass Vials

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays



Description	Qty	Part#	Price \$
Amber glass 2.0ml screw top standard opening vial	100/pk	392611640US	OEM
Clear glass 2.0ml screw top standard opening vial	100/pk	392611639US	OEM
Amber glass 2.0ml screw top standard opening vial, silanized	100/pk	392611643US	OEM
Clear glass 2.0ml screw top standard opening vial, silanized	100/pk	392611642US	OEM



Microvolume 100µl Glass Inserts for 12 x 32 mm 2 mL Standard Opening Vials

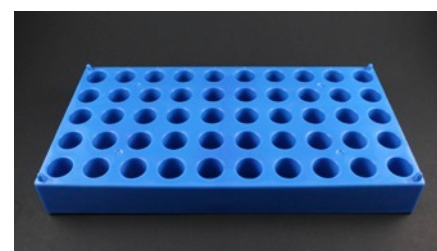
- Packaged in Ultra Clean "Tested" Foil
- For GC/MS and other highly sensitive detectors
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
100µL glass Inserts , conical point interior, no spring required	100/pk	392611593US	OEM
	1000/pk	392611593-10US	
100µL glass Inserts with polymer spring, conical with precision point interior	100/pk	392611591US	OEM
	1000/pk	392611591-10US	
100µL Silanized glass Inserts , conical point interior, no spring required	100/pk	392611856US	OEM
	1000/pk	392611856-10US	
100µL Silanized glass Inserts with polymer spring, conical with precision point interior	100/pk	392611592US	OEM
	1000/pk	392611592-10US	

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage

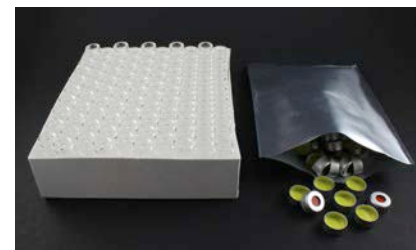


Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM



12 x 32 mm, 2 mL Crimp Top Standard Opening Vial Kits

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- Type 1 borosilicate glass
- 11mm aluminum open hole crimp caps
- Post baked Teflon/silicone septa for increased performance



Description	Qty	Part#	Price \$
Clear Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392611508US	OEM
	1000/case	392611508-10US	OEM
Amber Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392611509US	OEM
	1000/case	392611509-10US	OEM



11 mm Crimp Caps w/ Septa Inserted

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean "Tested" Foil
- Pre-inserted septa save time and reduce contamination
- GC/MS Ultra High Sensitive septa are specially prepared from high purity silicone and ultra clean PTFE (Teflon) to provide ultra low levels



Description	Qty	Part#	Price \$
11 mm Crimp Caps w/ Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392620521	OEM
	1000/case	392620522	OEM



12 x 32 mm, 2ml Crimp Top Standard Opening Glass Vials

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
Amber glass 2.0ml crimp top standard opening vial	100/pk	392611628US	OEM
Clear glass 2.0ml crimp top standard opening vial	100/pk	392611626US	OEM
Amber glass 2.0ml crimp top standard opening vial, Silanized	100/pk	392611629US	OEM
Clear glass 2.0ml crimp top standard opening vial, Silanized	100/pk	392611630US	OEM

11 mm Crimper & Decapper

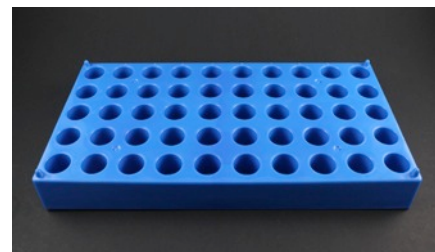
- Easy to use
- Adjustable crimping depth
- Permits minor handle pressure
- Decapper removes crimped seals from vials



Description	Qty	Part#	Price \$
Hand Crimper for 11mm Crimp Caps	1/pk	AL666011	OEM
Hand Decapper for 11mm Crimp Caps	1/pk	AL98711	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM

**Microvolume 100µl Glass Inserts for 12 x 32 mm 2 mL Standard Opening Vials**

- Packaged in Ultra Clean "tested" Foil
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
100µL glass Inserts , conical point interior, no spring required	100/pk	392611593US	OEM
	1000/pk	392611593-10US	
100µL glass Inserts with polymer spring, conical with precision point interior	100/pk	392611591US	OEM
	1000/pk	392611591-10US	
100µL Silanized glass Inserts , conical point interior, no spring required	100/pk	392611856US	OEM
	1000/pk	392611856-10US	
100µL Silanized glass Inserts with polymer spring, conical with precision point interior	100/pk	392611592US	OEM
	1000/pk	392611592-10US	

**12 x 32 mm, 2 mL Snap Top Standard Opening Vial Kits**

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- Type 1 borosilicate glass
- 11mm polyethylene open hole snap tops
- Post baked Teflon/silicone septa for increased performance



Description	Qty	Part#	Price \$
Clear Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392611501US	OEM
	1000/case	392611501-10US	
Amber Glass Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392611502US	OEM
	1000/case	392611502-10US	

**11 mm Snap Tops w/ Septa Inserted**

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean "Tested" Foil
- Pre-inserted septa save time and reduce contamination
- GC/MS Ultra High Sensitive septa are specially prepared from high purity silicone and ultra clean PTFE (Teflon) to provide ultra low levels



Description	Qty	Part#	Price \$
11mm Natural Polyethylene Cap w/ Pre-inserted Ultra GC/MS/PTFE Septa	100/pk	392611871US	OEM
	1000/pk	392611871-10US	

**12 x 32 mm, 2ml Snap Top Standard Opening Glass Vials**

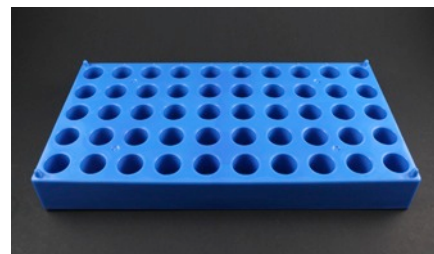
- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
Amber glass 2.0ml snap top standard opening vial	100/pk	392611628US	OEM
Clear glass 2.0ml snap top standard opening vial	100/pk	392611626US	OEM
Amber glass 2.0ml snap top standard opening vial, Silanized	100/pk	392611629US	OEM
Clear glass 2.0ml snap top standard opening vial, Silanized	100/pk	392611630US	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM

**Microvolume 100µl Glass Inserts for 12 x 32 mm 2 mL Standard Opening Vials**

- Packaged in Ultra Clean "tested" Foil
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
100µL glass Inserts , conical point interior, no spring required	100/pk	392611593US	OEM
	1000/pk	392611593-10US	
100µL glass Inserts with polymer spring, conical with precision point interior	100/pk	392611591US	OEM
	1000/pk	392611591-10US	
100µL Silanized glass Inserts , conical point interior, no spring required	100/pk	392611856US	OEM
	1000/pk	392611856-10US	
100µL Silanized glass Inserts with polymer spring, conical with precision point interior	100/pk	392611592US	OEM
	1000/pk	392611592-10US	

Custom products & bulk pricing available. Email or fax us with your specifications for more information.



12 x 32 mm Polypropylene Crimp Top Vial Kits

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- Kit contains Vials & 11mm Aluminum Crimp Caps w/ Ultra GC/MS PTFE Septa
- Chemically resistant polypropylene vials are an economical alternative for microsampling instead of using limited volume inserts.
- Ideal for sodium analysis or pH sensitive samples.
- Precision formed interior profile minimizes residual sample volume.



Description	Qty	Part#	Price \$
100µL Crimp Top Polypropylene Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk 1000/case	392611666US 392611666-10US	OEM
750µL Crimp Top Polypropylene Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk 1000/case	392611667US 392611667-10US	OEM



12 x 32 mm Polypropylene Vials

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- Chemically resistant polypropylene vials are an economical alternative for microsampling instead of using limited volume inserts
- Ideal for sodium analysis or pH sensitive samples
- Precision formed interior profile minimizes residual sample volume



Description	Qty	Part#	Price \$
100µL Crimp Top Polypropylene Vials (only)	100/pk 1000/case	392611666US9 392611666-10US9	OEM
750µL Crimp Top Polypropylene Vials (only)	100/pk 1000/case	392611667US9 392611667-10US9	OEM



11 mm Aluminum Crimp Caps w/ Septa

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean "Tested" Foil
- Pre-inserted septa save time and reduce contamination
- GC/MS Ultra High Sensitive septa are specially prepared from high purity silicone and ultra clean PTFE (Teflon) to provide ultra low levels



Description	Qty	Part#	Price \$
11 mm Aluminum Crimp Cap w/ Pre-inserted Ultra GC/MS/PTFE Septa	100/pk 1000/case	392620521 392620522	OEM

11 mm Crimper & Decapper

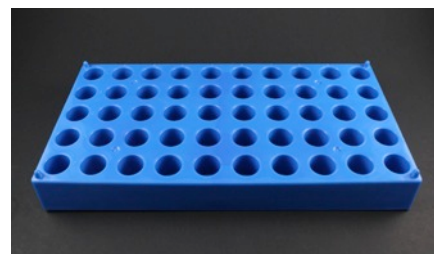
- Easy to use
- Adjustable crimping depth
- Permits minor handle pressure
- Decapper removes crimped seals from vials



Description	Qty	Part#	Price \$
Hand Crimper for 11mm Crimp Caps	1/pk	AL666011	OEM
Hand Decapper for 11mm Crimp Caps	1/pk	AL98711	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.



12 x 32 mm Polypropylene Screw Top Vial Kits

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- Kit contains Vials & Caps w/ Ultra GC/MS PTFE Septa
- Chemically resistant polypropylene vials are an economical alternative for microsampling instead of using limited volume inserts
- Ideal for sodium analysis or pH sensitive samples
- Precision formed interior profile minimizes residual sample volume



Description	Qty	Part#	Price \$
100µL Screw Top Polypropylene Vials w/ Caps & Pre-inserted Ultra GC/MS/PTFE Septa	100/pk 1000/case	392611665US 392611665-10US	OEM



12 x 32 mm Polypropylene Vials

- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean White Non-Plastic Trays
- Chemically resistant polypropylene vials are an economical alternative for microsampling instead of using limited volume inserts
- Ideal for sodium analysis or pH sensitive samples
- Precision formed interior profile minimizes residual sample volume



Description	Qty	Part#	Price \$
100µL Screw Top Polypropylene Vials	100/pk 1000/case	392611665US9 392611665-10US9	OEM



8 mm Screw Caps with Septa

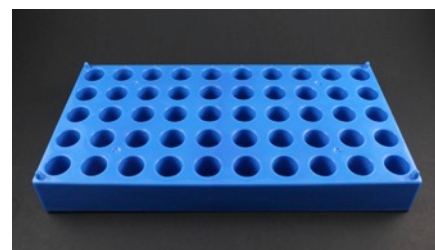
- For GC/MS and other highly sensitive detectors
- Packaged in Ultra Clean "Tested" Foil
- Pre-inserted septa save time and reduce contamination
- GC/MS Ultra High Sensitive septa are specially prepared from high purity silicone and ultra clean PTFE (Teflon) to provide ultra low levels



Description	Qty	Part#	Price \$
8mm Screw Caps w/ Pre-inserted Ultra GC/MS/PTFE Septa	100/pk 1000/case	392612023 392620557	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
Polypropylene Vial Rack for 2.0ml, 12 x 32 mm vials, holds 50 vials	1/pk	392611517	OEM

GC/MS Ultra Sensitive Snap Top Headspace Vial Kits & Accessories

- For GC/MS & other highly sensitive detectors
- GC/MS Ultra High Sensitive septa are specially prepared from high purity silicone and ultra clean PTFE (Teflon) to provide ultra low levels of contaminants to minimize interference with the analysis
- Has been qualified by a Major Chromatography Company using State-Of-The-Art GC/MS technology
- Ideal for Large Samples or Solvents



20 mm Ultra Headspace Vial Kits

- Type 1 Borosilicate Glass Vials
- Packaged in Ultra Clean White Non-Plastic Trays
- Septa & Caps packaged in Ultra Clean "Tested" Foil
- Polyethylene Snap Tops with 8mm hole



Description	Qty	Part#	Price \$
5ml Ultra Solvent Vial Kit, Includes: Vials & Snap Tops w/ Ultra Septa Pre-inserted, 20x 38mm	4/pk	392611980	OEM
	50/pk	392611981	OEM
	100/pk	392611982	OEM
10ml Ultra Vial Kit, Includes: Vials & Snap Tops w/ Ultra Septa Pre-inserted, 22 x 46mm	50/pk	392612006	OEM
	100/pk	392612007	OEM
Ultra Vial Starter Pack Contains 2ml (10 ea.), 5ml (6 ea.) and 10ml (5 ea.) Vials and Caps w/ Septa	1 ea.	392611978	OEM



20 mm Ultra Headspace Vials

- Type 1 Borosilicate Glass Vials
- Packaged in Ultra Clean White Non-Plastic Trays



Description	Qty	Part#	Price \$
5ml Ultra Vials, 20 x 38 mm (Vials only)	50/pk	392611980US	OEM
	100/pk	392611980-10US	
10ml Ultra Vials, 22 x 46 mm (Vial only)	50/pk	392611983US	OEM
	100/pk	392611983-10US	



20 mm Ultra GC/MS Snap Tops and Septa

- Pre-inserted septa save time and reduce contamination
- Polyethylene Snap Tops have 8mm opening
- Packaged in Ultra Clean "Tested" Foil



Description	Qty	Part#	Price \$
20 mm Snap Tops, 6 mm hole, Ultra GC/MS Septa	50/pk	392611984	OEM
Ultra GC/MS Septa for 20 mm Snap Tops	50/pk	392611986	OEM
	100/pk	392611988	OEM

Ultra Sensitive High Temp/Low Bleed Septa, 400°C Max

- Injector Temperature 400°C
- Conditioned For High Sensitivity Analysis, Ultra Low Bleed
- Precision Molded, Easy to Pierce
- Premium Platinum Cured Silicone
- Precise Fit, No Flared Edges
- No Ghost Peaks
- Packaged in Ultra Clean Wide Mouth Glass Bottles, Ready to Use



Description	Qty	Part#	Price \$
Ultra Sensitive High Temp/Low Bleed Septa 5 mm (3/16 in.)	50/Pk	40000	OEM
	100/Pk	40000-100	
Ultra Sensitive High Temp/Low Bleed Septa 9 mm (11/32 in.)	50/Pk	40001	OEM
	100/Pk	40001-100	
Ultra Sensitive High Temp/Low Bleed Septa 9.5 mm (3/8 in.)	50/Pk	40002	OEM
	100/Pk	40002-100	
Ultra Sensitive High Temp/Low Bleed Septa 11 mm (7/16 in.)	50/Pk	40003	OEM
	100/Pk	40003-100	
Ultra Sensitive High Temp/Low Bleed Septa 11.5 mm (11/24 in.)	50/Pk	40004	OEM
	100/Pk	40004-100	
Ultra Sensitive High Temp/Low Bleed Septa 12.5 mm (1/2 in.)	50/Pk	40005	OEM
	100/Pk	40005-100	
Ultra Sensitive High Temp/Low Bleed Septa 17 mm (21/32 in.)	50/Pk	40006	OEM
	100/Pk	40006-100	
Ultra Sensitive High Temp/Low Bleed Septa Shimadzu Plug	50/Pk	39261 1693US	OEM
	100/Pk	39261 1694US	

Ultra Sensitive High Temp/Low Bleed Septa, 400°C Max (w/ Guide Hole)

- Injector Temperature 400°C
- Guide Hole for Easy Needle Insertion
- Conditioned For High Sensitivity Analysis, Ultra Low Bleed
- Precision Molded, Easy to Pierce
- Premium Platinum Cured Silicone
- Precise Fit, No Flared Edges
- No Ghost Peaks
- Packaged in Ultra Clean Wide Mouth Glass Bottles, Ready to Use



Description	Qty	Part#	Price \$
Ultra Sensitive High Temp/Low Bleed Septa 5 mm (3/16 in.) w/ Guide Hole	50/Pk	40008	OEM
	100/Pk	40008-100	
Ultra Sensitive High Temp/Low Bleed Septa 9 mm (11/32 in.) w/ Guide Hole	50/Pk	40009	OEM
	100/Pk	40009-100	
Ultra Sensitive High Temp/Low Bleed Septa 9.5 mm (3/8 in.) w/ Guide Hole	50/Pk	40010	OEM
	100/Pk	40010-100	
Ultra Sensitive High Temp/Low Bleed Septa 11 mm (7/16 in.) w/ Guide Hole	50/Pk	40011	OEM
	100/Pk	40011-100	
Ultra Sensitive High Temp/Low Bleed Septa 11.5 mm (11/24 in.) w/ Guide Hole	50/Pk	40012	OEM
	100/Pk	40012-100	
Ultra Sensitive High Temp/Low Bleed Septa 12.5 mm (1/2 in.) w/ Guide Hole	50/Pk	40013	OEM
	100/Pk	40013-100	
Ultra Sensitive High Temp/Low Bleed Septa 17 mm (21/32 in.) w/ Guide Hole	50/Pk	40014	OEM
	100/Pk	40014-100	
Ultra Sensitive High Temp/Low Bleed Septa Shimadzu Plug w/ Guide Hole	50/Pk	39261 1693US	OEM
	100/Pk	39261 1694US	

Ultra Sensitive General Purpose Medium Temp/Low Bleed Septa, 325°C Max

- Injector Temperature 325°C
- Conditioned For High Sensitivity Analysis, Ultra Low Bleed
- Precision Molded, Easy to Pierce
- Premium Platinum Cured Silicone
- Precise Fit, No Flared Edges
- No Ghost Peaks
- Packaged in Ultra Clean Wide Mouth Glass Bottles, Ready to Use



Description	Qty	Part#	Price \$
Ultra Sensitive High Temp/Low Bleed Septa 5 mm (3/16 in.)	50/Pk	40016	OEM
	100/Pk	40016-100	
Ultra Sensitive High Temp/Low Bleed Septa 9 mm (11/32 in.)	50/Pk	40017	OEM
	100/Pk	40017-100	
Ultra Sensitive High Temp/Low Bleed Septa 9.5 mm (3/8 in.)	50/Pk	40018	OEM
	100/Pk	40018-100	
Ultra Sensitive High Temp/Low Bleed Septa 11 mm (7/16 in.)	50/Pk	40019	OEM
	100/Pk	40019-100	
Ultra Sensitive High Temp/Low Bleed Septa 11.5 mm (11/24 in.)	50/Pk	40020	OEM
	100/Pk	40020-100	
Ultra Sensitive High Temp/Low Bleed Septa 12.5 mm (1/2 in.)	50/Pk	40021	OEM
	100/Pk	40021-100	
Ultra Sensitive High Temp/Low Bleed Septa 17 mm (21/32 in.)	50/Pk	40022	OEM
	100/Pk	40022-100	

Ultra Sensitive General Purpose Medium Temp/Low Bleed Septa, 325°C Max (w/ Guide Hole)

- Injector Temperature 325°C
- Guide Hole for Easy Needle Insertion
- Conditioned For High Sensitivity Analysis, Ultra Low Bleed
- Precision Molded, Easy to Pierce
- Premium Platinum Cured Silicone
- Precise Fit, No Flared Edges
- No Ghost Peaks
- Packaged in Ultra Clean Wide Mouth Glass Bottles, Ready to Use



Description	Qty	Part#	Price \$
Ultra Sensitive High Temp/Low Bleed Septa 5 mm (3/16 in.) w/ Guide Hole	50/Pk	40024	OEM
	100/Pk	40024-100	
Ultra Sensitive High Temp/Low Bleed Septa 9 mm (11/32 in.) w/ Guide Hole	50/Pk	40025	OEM
	100/Pk	40025-100	
Ultra Sensitive High Temp/Low Bleed Septa 9.5 mm (3/8 in.) w/ Guide Hole	50/Pk	40026	OEM
	100/Pk	40026-100	
Ultra Sensitive High Temp/Low Bleed Septa 11 mm (7/16 in.) w/ Guide Hole	50/Pk	40027	OEM
	100/Pk	40027-100	
Ultra Sensitive High Temp/Low Bleed Septa 11.5 mm (11/24 in.) w/ Guide Hole	50/Pk	40028	OEM
	100/Pk	40028-100	
Ultra Sensitive High Temp/Low Bleed Septa 12.5 mm (1/2 in.) w/ Guide Hole	50/Pk	40029	OEM
	100/Pk	40029-100	
Ultra Sensitive High Temp/Low Bleed Septa 17 mm (21/32 in.) w/ Guide Hole	50/Pk	40030	OEM
	100/Pk	40030-100	

Thermo Fisher Scientific Autosampler Vials



8mm Standard Opening Thermo Vial Kits

- 8mm screw thread design
- Standard opening
- Post baked Teflon/silicone septa for increased performance. Compatible with most autosamplers
- Lot to lot quality assurance with lot number coding. Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray
- Caps, septa, microvolume inserts and silane treated vials available



Description	Qty	Part No.	Price \$
Clear Glass 1.8ml screw top standard opening vial; Screw cap, 8mm black polypropylene with Yellow PTFE/silicone septa	100/pk	A4954-010	OEM
Amber Glass 1.8ml screw top standard opening vial; Screw cap, 8mm black polypropylene with Yellow PTFE/silicone septa	100/pk	A4954-010A	OEM
Screw Top Vials Kit - includes: 12x32mm screw top vials 1.8ml, Blue PTFE/Silicone liner installed into the 8-425 black polypropylene cap. Borosilicate glass 51, amber. Clam shell package. Use 100µL inserts for limiting volume.	100/pk	A4967-010	OEM
Screw Top Vials Kit - includes: 12x32mm screw top vials 1.8ml, Blue PTFE/Silicone liner installed into the 8-425 black polypropylene cap. Borosilicate glass 33, clear. Clam shell package. Use 100µL inserts for limiting volume.	100/pk	60180-203	OEM
Amber Screw Top Vials Kit - includes: 12x32mm screw top vials 1.8ml, Blue PTFE/Silicone liner installed into the 8-425 black polypropylene cap. Borosilicate glass 51, amber. Clam shell package. Use 100µL inserts for limiting volume.	100/pk	60180-204	OEM



8mm Standard Opening Thermo Vials

- 8mm screw thread design
- Standard opening
- Post baked Teflon/silicone septa for increased performance. Compatible with most autosamplers
- Lot to lot quality assurance with lot number coding. Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray
- Caps, septa, microvolume inserts and silane treated vials available

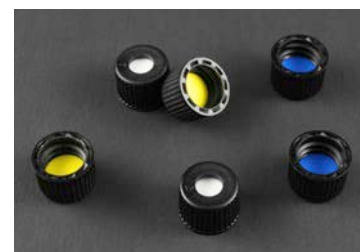


Description	Qty	Part No.	Price \$
Clear glass 1.8ml screw top standard opening vial	100/pk 1000/pk	A4951-010 A4951-100	OEM
Amber glass 1.8ml screw top standard opening vial	100/pk 1000/pk	A4966-010 A4966-100	OEM



8mm Thermo Caps w/ Septa

- Sure-sealing polypropylene caps
- Convenient, clean pre-inserted septa
- Four septa to choose from



Description	Qty	Part No.	Price \$
Autosampler Screw Cap, 8mm black polypropylene, No Septa	100/pk	A4953-010	OEM
	1000/pk	A4953-100	
8mm screw caps, black polypropylene w/ Blue PTFE Silicone Septa Installed, 65 mils	100/pk	A4969-010	OEM
	1000/pk	A4969-100	
8mm screw caps, black polypropylene w/ Blue PTFE Silicone Septa Installed, 65 mils	100/pk	A4979-010	OEM
	1000/pk	A5590-020	
8mm Black Polypropylene Cap w/ Teflon Liner, 10 mils, .328" dia. not installed	1000/pk	A5590-010	OEM
8mm screw caps, black polypropylene w/ Yellow PTFE Silicone Septa Installed, 45 mils	1000/pk	A4969-100Y	OEM



8mm Septa & Liners

- Fits Standard opening 8-425 polypropylene caps
- Post baked Teflon/silicone septa for increased performance



Description	Qty	Part No.	Price \$
Autosampler Septa, 8mm blue Teflon/silicone 65 mils	100/pk	A4952-010	OEM
	1000/pk	A4952-100	
Teflon Liner, 10 mils, .328" dia.	100/pk	A4968-010	OEM
	1000/pk	A4968-100	
Autosampler Septa, 8mm Yellow Teflon/silicone 45 mils	100/pk	A4952-010Y	OEM
	1000/pk	A4952-100Y	



100µL Inserts

- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part No.	Price \$
100µL Glass Conical Insert, No Spring Required	100/pk	A4961-010	OEM
	1000/pk	A4961-100	



9mm Wide Opening Thermo Kits & Vials

- 9mm thread design, 40% larger opening
- Reduces the chance of bent or broken needles
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray



Description	Qty	Part No.	Price \$
Clear 1.8ml screw wide; 250µL Glass Insert, no spring; Cap, 9mm Black polypropylene with Blue PTFE/Silicone septa	100/pk	60053-62017	OEM
Amber 1.8ml screw wide; 250µL Glass Insert, no spring; Cap, 9mm Black polypropylene with Blue PTFE/Silicone septa	100/pk	60053-62017A	OEM



9mm Wide Opening Thermo Vials

- 9mm thread design, 40% larger opening
- Reduces the chance of bent or broken needles
- Lot to lot quality assurance with lot number coding.
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray



Description	Qty	Part No.	Price \$
Clear Glass 1.8ml, 9mm Screw Top Wide Opening Vial	100/pk	60053-01013	OEM
Amber Glass 1.8ml, 9mm Screw Top Wide Opening Vial	100/pk	60053-01013A	OEM



9mm Caps & Septa

- Compatible with most robotic autosamplers
- Sure-sealing polypropylene caps
- Available with septa installed



Description	Qty	Part No.	Price \$
9mm Screw Caps, Black polypropylene (Caps Only)	100/pk	60053-01015	OEM
9mm Screw Caps, Red polypropylene (Caps Only)	100/pk	60053-01015R	OEM
9mm Septa, Blue PTFE/Silicone, .040" thk. (Septa Only)	100/pk	60053-01016	OEM
9mm Septa, Red PTFE/Silicone, .040" thk. (Septa Only)	100/pk	60053-01016R	OEM



9mm Caps w/ Pre-Inserted Septa

- Compatible with most robotic autosamplers
- Sure-sealing polypropylene caps
- Convenient, clean pre-inserted septa
- PTFE/Silicone Septa



Description	Qty	Part No.	Price \$
9mm Screw Caps, Black polypropylene w/ Blue PTFE/Silicone Septa	100/pk	60053-01015BS	OEM
	1000/pk	60053-01015BS-10	
9mm Screw Caps, Red polypropylene w/ Red PTFE/Silicone Septa	100/pk	60053-01015RS	OEM
	1000/pk	60053-01015RS-10	



250µL Inserts

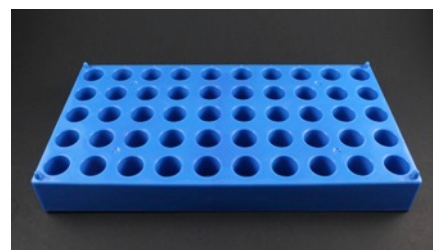
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part#	Price \$
250µL Glass Insert, conical point interior, no spring required	100/pk	60053-01014	OEM
	1000/pk	60053-01014-10	
250µL Silanized Glass Insert, conical point interior, no spring required	100/pk	60053-01014-11	OEM
	1000/pk	60053-01014-12	
250µL Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	60053-01014-13	OEM
	1000/pk	60053-01014-14	
250µL Silanized Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	60053-01014-15	OEM
	1000/pk	60053-01014-16	

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage

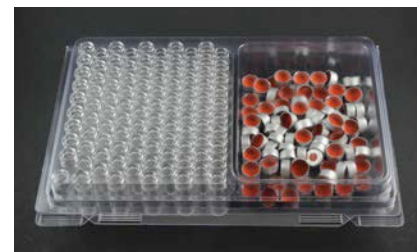


Description	Qty	Part No.	Price \$
PP Vial Rack, 50 hole, Polypropylene	1/pk	A4970-010	OEM



Crimp Top Standard Opening Thermo Vial Kits

- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray
- 11mm aluminum open hole crimp caps
- Post baked Teflon/silicone septa for increased performance



Description	Qty	Part No.	Price \$
Clear glass 2.0ml crimp top standard opening vial; Crimp cap, 11mm silver aluminum with PTFE/red rubber septa. Use 100µL inserts for limiting volume.	100/pk 1000/pk	A4957-010 A4957-100	OEM
Amber glass 1.8ml crimp top standard opening vial; Crimp cap, 11mm silver aluminum with PTFE/red rubber septa. Use 100µL inserts for limiting volume.	100/pk 1000/pk	A4965-010 A4965-100	OEM



Crimp Top Standard Opening Thermo Vials

- Standard opening. Compatible with most autosamplers.
- Lot to lot quality assurance with lot number coding.
- Type 1 borosilicate glass. Packaged in one-piece clamshell tray.
- 11mm aluminum open hole crimp caps available.



Description	Qty	Part No.	Price \$
Clear glass 2.0ml crimp top standard opening vial	100/pk 1000/pk	A4956-010 A4956-100	OEM
Clear glass 2.0ml crimp top standard opening vial, Silanized	100/pk 1000/pk	A4956-010CS A4956-100CS	OEM
Amber glass 2.0ml crimp top standard opening vial	100/pk 1000/pk	A4964-010 A4964-100	OEM
Amber glass 2.0ml crimp top standard opening vial, Silanized	100/pk 1000/pk	A4964-010AS A4964-100AS	OEM



Crimp Top Caps w/ Septa

- Crimp tight aluminum caps
- Five colors of caps for easy identification
- PTFE/ Red Rubber Liners



Description	Qty	Part No.	Price \$
11mm crimp cap, aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	A4955-010 A4955-100	OEM
11mm crimp cap, gold aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	A4955-020 A4955-200	OEM
11mm crimp cap, blue aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	A4955-030 A4955-300	OEM
11mm crimp cap, green aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	A4955-040 A4955-400	OEM
11mm crimp cap, red aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	A4955-050 A4955-500	OEM



100µL Inserts

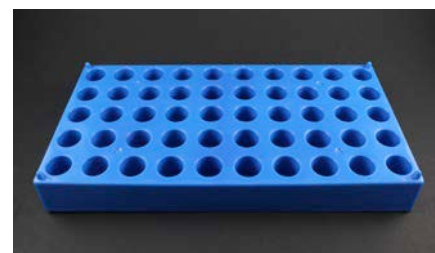
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part No.	Price \$
100µL Glass Conical Insert, No Spring Required	100/pk	A4961-010	OEM
	1000/pk	A4961-100	
100µL Glass Inserts with polymer spring, conical with precision point interior	100/pk	A4961-012	OEM
	1000/pk	A4961-202	
100µL Silanized glass Inserts , conical point interior, no spring required	100/pk	A4961-013	OEM
	1000/pk	A4961-203	
100µL Silanized glass Inserts with polymer spring, conical with precision point interior	100/pk	A4961-014	OEM
	1000/pk	A4961-204	

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
PP Vial Rack, 50 hole, Polypropylene	1/pk	A4970-010	OEM

11 mm Crimper & Decapper

- Easy to use
- Adjustable crimping depth
- Permits minor handle pressure
- Decapper removes crimped seals from vials

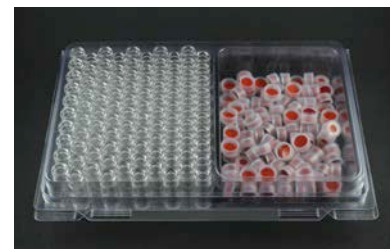


Description	Qty	Part#	Price \$
Hand Crimper for 11mm Crimp Caps	1/pk	60180-261	OEM
Hand Decapper for 11mm Crimp Caps	1/pk	60180-262	OEM



Snap Top Wide Opening Thermo Vial Kits

- 40% larger opening
- Reduces the chance of bent or broken needles
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one piece clamshell tray



Description	Qty	Part No.	Price \$
Clear glass 1.8ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/red rubber septa. Use 250µL inserts for limiting volume	100/pk	A4962-010	OEM
Amber glass 1.8ml snap top wide opening vial; Snap cap, 11mm natural polyethylene with PTFE/red rubber septa. Use 250µL inserts for limiting volume	100/pk	A4962-010A	OEM



Snap Tops

- Snap-tight polyethylene Snap Caps
- Convenient, clean pre-installed septa



Description	Qty	Part No.	Price \$
Snap Caps, 11mm natural polyethylene with PTFE/red rubber septa	100/pk	A4963-010	OEM



250µL Inserts

- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass

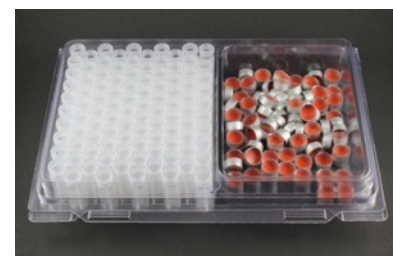


Description	Qty	Part#	Price \$
250µL Glass Insert, conical point interior, no spring required	100/pk	60053-01014	OEM
	1000/pk	60053-01014-10	
250µL Silanized Glass Insert, conical 4 point interior, no spring required	100/pk	60053-01014-11	OEM
	1000/pk	60053-01014-12	
250µL Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	60053-01014-13	OEM
	1000/pk	60053-01014-14	
250µL Silanized Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk	60053-01014-15	OEM
	1000/pk	60053-01014-16	



Polypropylene Thermo Vial Kits

- Unassembled convenience kits offer the vials and seals packaged together for ease of use and storage. The kits contain vials and 11 mm aluminum seals with Teflon/rubber septa.
- Chemically resistant polypropylene vials are an economical alternative for microsampling instead of using limited volume inserts.
- Ideal for sodium analysis or pH sensitive samples.
- Precision formed interior profile minimizes residual sample volume.



Description	Qty	Part No.	Price \$
Vial Kit, 100µL Polypropylene crimp top Vial, pulled point interior; 11mm Aluminum Seal w/ PTFE/red rubber septa	100/pk 1000/pk	A4959-010 A4959-100	OEM
Vial Kit, 600µL Polypropylene crimp top vial, conical formed interior, 11mm Aluminum Seal w/ PTFE/red rubber septa	100/pk 1000/pk	A4958-010 A4958-100	OEM



Polypropylene Thermo Vials

- Chemically resistant polypropylene vials are an economical alternative for microsampling instead of using limited volume inserts.
- Ideal for sodium analysis or pH sensitive samples.
- Vials have a standard 11 mm aluminum seal finish allowing use with 11 mm aluminum seals or snap caps.
- Precision formed interior profile minimizes residual sample volume.



Description	Qty	Part No.	Price \$
100µL Crimp top Polypropylene vials	1000/pk	A5130-100	OEM
600µL Polypropylene Vial; Crimp top; tapered interior	1000/pk	A5129-100	OEM



Crimp Top Caps w/ Septa

- Crimp tight aluminum caps
- Five colors of caps for easy identification
- PTFE/ Red Rubber Liner



Description	Qty	Part No.	Price \$
11mm crimp cap, aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	A4955-010 A4955-100	OEM
11mm crimp cap, gold aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	A4955-020 A4955-200	OEM
11mm crimp cap, blue aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	A4955-030 A4955-300	OEM
11mm crimp cap, green aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	A4955-040 A4955-400	OEM
11mm crimp cap, red aluminum, PTFE/ Red rubber liner	100/pk 1000/pk	A4955-050 A4955-500	OEM

11 mm Crimper & Decapper

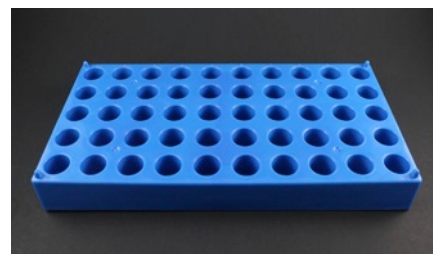
- Easy to use
- Adjustable crimping depth
- Permits minor handle pressure
- Decapper removes crimped seals from vials



Description	Qty	Part#	Price \$
Hand Crimper for 11mm Crimp Caps	1/pk	60180-261	OEM
Hand Decapper for 11mm Crimp Caps	1/pk	60180-262	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
PP Vial Rack, 50 hole, Polypropylene	1/pk	A4970-010	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Shell Thermo Vial Kits

- Large opening.
- Improved autosampler needle accuracy & handling.
- Lot to lot quality assurance with lot number coding.
- Type 1 borosilicate glass.
- Packaged in a sturdy, easy open, one piece clamshell tray.
- Economical alternative to screw top and crimp top vials.
- Push-in polyethylene cap with thin molded center.
- Cap has centering holder for 100 μ L inserts.
- Easy transfer of samples.



Description	Qty	Part No.	Price \$
Clear glass 2.0ml shell Vial; Polyethylene clear push-in caps with centering holder for insert	100/pk	A4948-010	OEM
Clear glass 2.0ml shell Vial; 100 μ L glass Insert; Polyethylene clear push-in caps with centering holder for insert	100/pk	60053-62008	OEM

Shell Thermo Vials, Caps, & Inserts

- Vials have large opening for easy transfer of samples
- Improved autosampler needle accuracy & handling
- Type 1 borosilicate glass
- Economical alternative to screw top and crimp top vials
- Molded polypropylene natural caps
- Inserts fit directly into molded cap



Description	Qty	Part No.	Price \$
2.0ml Shell Clear Glass vials	100/pk	A4946-010	OEM
	1000/pk	A4946-100	
Shell Vial Caps Natural, .010" Molded Septum	100/pk	60053-40009	OEM
100 μ L glass insert for shell vials	100/pk	A4949-010	OEM
	1000/pk	A4949-100	

Custom products & bulk pricing available. Email or fax us with your specifications for more information.



CE Thermo Standard Opening Vial Kits

- For Capillary Electrophoresis Applications
- Cross slit liner for easy penetration
- Lot to lot quality assurance with lot number coding
- Available in Type 1 borosilicate glass or polypropylene
- Packaged in a sturdy, easy open, one piece clamshell tray

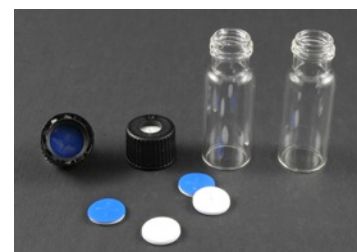


Description	Qty	Part No.	Price \$
CE Ultra Vial Kit - Includes: 12x32mm screw top vials 1.8ml, Blue PTFE/ White Silicone Cross Slit liner installed into the 8-425 black polypropylene cap. Borosilicate glass 33, clear. Clam shell package.	100/pk	A5400-010	OEM
CE Ultra 100µL PP Vial Kit - Includes: 12x32mm Screw Top Polypropylene vials, 100µL, Blue PTFE/ White Silicone Cross Slit liner installed into the 8-425 black polypropylene cap. Clam shell package.	100/pk	A5446-010	OEM
CE Ultra 500µL PP Vial Kit - Includes: 12x32mm Screw Top Polypropylene vials, 500µL, Blue PTFE/ White Silicone Cross Slit liner installed into the 8-425 black polypropylene cap. Clam shell package.	100/pk	A5447-010	OEM



CE Thermo Standard Opening Vials, Caps, & Septa

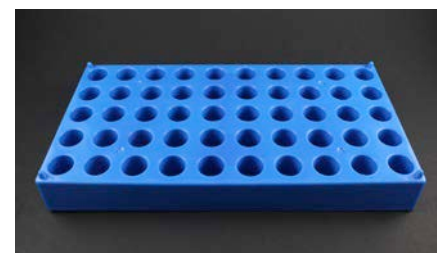
- For Capillary Electrophoresis Applications
- Cross slit liner for easy penetration
- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Caps have pre-installed cross slit septa



Description	Qty	Part No.	Price \$
CE Ultra Screw Top Vials 1.8ml, Clear Glass	100/pk	A5403-010	OEM
CE Ultra Vial Caps with Blue PTFE/ White Silicone Cross Slit Septa installed	100/pk	A5402-010	OEM
CE Ultra Blue PTFE/ White Silicone Cross Slit Septa	100/pk	A5401-010	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



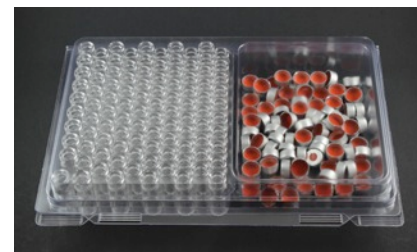
Description	Qty	Part No.	Price \$
PP Vial Rack, 50 hole, Polypropylene	1/pk	A4970-010	OEM

HP/Agilent Vials



12 x 32 mm, 2ml Crimp Top Wide Opening Glass Vial Kits

- 40% larger opening.
- Post baked Teflon/silicone septa for increased performance.
- Type 1 borosilicate glass.
- Packaged in a sturdy, easy open, one-piece clamshell tray.
- New Improved Teflon/red rubber septa for increased performance.



Description	Qty	Part No.	Price \$
Crimp Top Vials Kit - includes: 12 x 32mm wide mouth crimp top vials 2.0 ml, 11mm aluminum crimp seals with PTFE/natural rubber liner installed into the cap. Borosilicate glass 33, clear. Clam shell package. Use 250µL inserts for limiting volume.	100/pk 1000/pk	60180-209 60180-209-10	OEM
Crimp Top Vials Kit - includes: 12 x 32mm wide mouth crimp top vials 2.0 ml, 11mm aluminum crimp seals with Red PTFE/silicone/PTFE liner installed into the cap. Borosilicate glass 33, clear. Clam shell package. Use 250µL inserts for limiting volume.	100/pk 1000/pk	60180-210 60180-210-10	OEM



12 x 32 mm, 2ml Snap Top Wide Opening Glass Vial Kits

- 40% larger opening.
- Reduces the chance of bent or broken needles.
- Packaged in a sturdy, easy open, one piece clamshell tray.

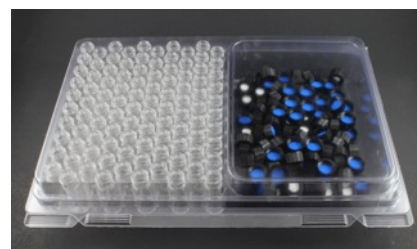


Description	Qty	Part No.	Price \$
Snap Vials Kit - includes: 12 x 32 mm wide mouth snap vials 2.0 ml, 11mm polypropylene snap seals with PTFE/natural rubber liner installed into the cap. Borosilicate glass 33, clear. Clam shell package. Use 250µL inserts for limiting volume.	100/pk 1000/pk	60180-221 60180-221-10	OEM
Snap Vials Kit - includes: 12 x 32 mm wide mouth snap vials 2.0 ml, 11mm polypropylene snap seals with Red PTFE/silicone/PTFE liner installed into the cap. Borosilicate glass 33, clear. Clam shell package. Use 250µL inserts for limiting volume.	100/pk 1000/pk	60180-222 60180-222-10	OEM



12 x 32 mm, 2ml, 9mm Screw Top Wide Opening Glass Vial Kits

- 9mm thread design, 40% larger opening
- Reduces the chance of bent or broken needles
- Packaged in a sturdy, easy open, one-piece clamshell tray



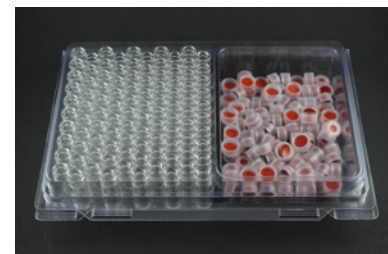
Description	Qty	Part No.	Price \$
Screw Top Vials Kit - includes: 12 x 32 mm wide mouth screw top vials 2.0 ml, Red PTFE/natural rubber liner installed into the 9mm black poly cap. Borosilicate glass 33, clear. Clam shell package. Use 250µL inserts for limiting volume.	100/pk 1000/pk	60180-223 60180-223-10	OEM
Screw Top Vials Kit - includes: 12 x 32 mm wide mouth screw top vials 2.0 ml, Blue PTFE/silicone/PTFE liner installed into the 9mm black poly cap. Borosilicate glass 33, clear. Clam shell package. Use 250µL inserts for limiting volume.	100/pk 1000/pk	60180-224 60180-224-10	OEM



Waters Vials

12 x 32 mm, 2ml Snap Top Wide Opening Glass Vial Kits

- 40% larger opening.
- Reduces the chance of bent or broken needles.
- Packaged in a sturdy, easy open, one piece clamshell tray.

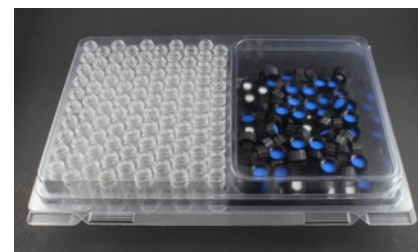


Description	Qty	Part No.	Price \$
Snap Vials Kit - includes: 12x32mm wide mouth snap vials 2.0ml, natural polypropylene snap seals with Red PTFE/silicone liner installed into cap. Borosilicate glass 33, clear. Clam shell package. Use 250µL inserts for limiting volume.	100/pk	60180-225	OEM
Snap Vials Kit - includes: 12x32mm wide mouth snap vials 2.0ml, natural polypropylene snap seals with Red PTFE/silicone liner installed into cap. Borosilicate glass 33, Amber. Clam shell package. Use 250µL inserts for limiting volume.	100/pk	60180-226	OEM



12 x 32 mm, 2ml, 9mm Screw Top Wide Opening Glass Vial Kits

- 9mm thread design, 40% larger opening
- Reduces the chance of bent or broken needles
- Packaged in a sturdy, easy open, one-piece clamshell tray



Description	Qty	Part No.	Price \$
Screw Top Vials Kit - includes: 12x32mm wide mouth screw top vials 2.0ml, Blue PTFE/silicone liner installed into the 9mm black polypropylene cap. Borosilicate glass 33, clear. Clam shell package. Use 250µL inserts for limiting volume.	100/pk	60180-227	OEM



12 x 32 mm, 2ml Screw Top Standard Opening Glass Vial Kits

- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Packaged in a sturdy, easy open, one-piece clamshell tray
- 8-425 Black Screw caps
- Post baked Teflon/silicone septa for increased performance



Description	Qty	Part No.	Price \$
Screw Top Vials Kit - includes: 12x32mm screw top vials 1.8ml, Blue PTFE/silicone liner installed into the 8-425 black polypropylene cap. Borosilicate glass 33, clear. Clam shell package. Use 100µL inserts for limiting volume.	100/pk	60180-228	OEM

Waters 48



15 x 45 mm, 4ml Screw Top Glass Vial Kits

- Lot to lot quality assurance with lot number coding
- Type 1 borosilicate glass
- Use with: Brucker LC51; Gilson, Kontron MSI 660; Perkin Elmer Autosystem; Phillips LC-XP; Shimadzu AOC-14/1400, SIL-2AS, LC-10A; Spark Marathon; TosoH TSK-6080; Waters 48-Position, 717



Description	Qty	Part No.	Price \$
Screw Top Vials Kit - includes: 15x45mm screw top vials 4.0ml, Red PTFE/silicone liner installed into the 13-425 black phenolic cap. Borosilicate glass 33, clear.	100/pk	60180-241	OEM
Screw Top Vials Kit - includes: 15x45mm screw top vials 4.0ml, Red PTFE/silicone liner installed into the 13-425 black phenolic cap. 300µl glass insert w/compression spring. Borosilicate glass 33, clear.	100/pk	60180-242	OEM
Screw Top Vials kit - Includes: 15x45mm screw top vials 4.0ml, PTFE liner installed into the 13-425 black phenolic cap. Borosilicate glass 33, clear.	100/pk	60180-243	OEM
Screw Top Vials kit - includes: 15x45 mm screw top vials 4.0ml, PTFE liner installed into the 13-425 black phenolic cap. 300µl glass insert w/compression spring. Borosilicate glass 33, clear.	100/pk	60180-244	OEM



Waters 96

8 x 40mm, 1ml Push-In Cap, Glass and Polypropylene Vial Kits

- Fits Waters 96 position tray
- Designed for best seal
- Push in cap for easy seal
- Lot to lot quality assurance with lot number coding
- Aqueous sample compatibility
- Caps have 0.01" center for easy needle penetration
- Type 1 borosilicate glass



Description	Qty	Part No.	Price \$
Shell Vial Kit - includes: 8x40 mm shell vial 1ml, one piece natural polypropylene cap. Borosilicate glass 33, clear.	250/pk	60180-256	OEM
Shell Vial Kit w/insert - includes: 8x40 mm shell vial 1ml, one piece natural polypropylene cap. 150µl limited volume insert w/compression spring. Borosilicate glass 33, clear.	250/pk	60180-255	OEM
Limited Volume Vials Kit - includes: 8x40 mm limited volume vial 700µl, one piece natural polypropylene cap. Polypropylene Vial.	250/pk	60180-253	OEM

Limited Volume Inserts 100µL, 250µL, & 300µL

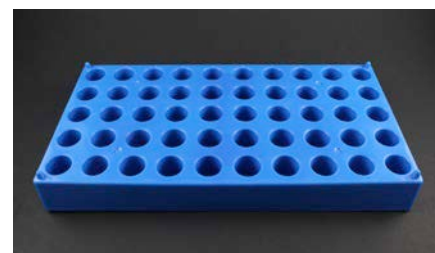
- Insert spring eliminates bent needles with shock absorbing action and eliminates dead volume
- Self-aligning spring for correct insert position
- Choice of conical inserts formed on a precision mandrel, or economical conical pulled point inserts
- Silane treated inserts available for polar compounds i.e. amines, pesticides, phenols, proteins, etc.
- Type 1 borosilicate glass



Description	Qty	Part No.	Price \$
Limited Volume Insert 100µl - includes: 100µl glass conical insert, No Spring Required. Use with standard mouth vials.	100/pk	60180-265	OEM
Limited Volume Insert 300µl - includes: 300µl glass conical insert, No Spring Required. Use with wide mouth vials and 2ml shell vials.	100/pk	60180-266	OEM
100µL Glass Conical Insert, no spring required	100/pk 1000/pk	A4961-010 A4961-100	OEM
100µL Glass Inserts with polymer spring, conical with precision point interior	100/pk 1000/pk	A4961-012 A4961-202	OEM
100µL Silanized glass Inserts , conical point interior, no spring required	100/pk 1000/pk	A4961-013 A4961-203	OEM
100µL Silanized glass Inserts with polymer spring, conical with precision point interior	100/pk 1000/pk	A4961-014 A4961-204	OEM
250µL Glass Insert, conical point interior, no spring required	100/pk 1000/pk	60053-01014 60053-01014-10	OEM
250µL Silanized Glass Insert, conical point interior, no spring required	100/pk 1000/pk	60053-01014-11 60053-01014-12	OEM
250µL Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk 1000/pk	60053-01014-13 60053-01014-14	OEM
250µL Silanized Glass Insert with polymer spring, conical with precision formed mandrel interior	100/pk 1000/pk	60053-01014-15 60053-01014-16	OEM

Polypropylene Vial Rack

- Holds (50) 2.0ml, 12 x 32 mm Vials
- Autoclavable
- Stackable
- Rated at -90°C for freezer storage



Description	Qty	Part No.	Price \$
PP Vial Rack, 50 hole, Polypropylene	1/pk	A4970-010	OEM

FEP Tubing, Precut Rolls

- Fluorinated Ethylene Polypropylene (FEP)
- Precut into 25 ft. rolls
- Resistance to chemical attack
- Optical Transparency
- Lower heat shrink temperature & more flexibility than PTFE
- More lubricious than PFA



Description	Qty	Part No.	Price \$
FEP Industrial Tubing – 1/8" O.D. x 1/16" I.D. (25 ft. roll)	1/pkg	CH-106194	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Headspace Vials

- ♦ Agilent (HP)
- ♦ Bruker
- ♦ Carlo Erba
- ♦ Chrompack
- ♦ CTC Analytics
- ♦ Dani
- ♦ L.E.A.P.
- ♦ Perkin-Elmer
- ♦ Tekmar
- ♦ Varian
- ♦ Shimadzu

Reference Chart

*Refer to Reference Letters on the left side of the following pages for the proper vial to fit your instrument

Brand & Model	REFERENCE LETTER F	REFERENCE LETTER G	REFERENCE LETTER H	REFERENCE LETTER I	REFERENCE LETTER J	REFERENCE LETTER K	REFERENCE LETTER L	REFERENCE LETTER M
Agilent (HP)	X		X	X				
Agilent (Modern HS Auto Samplers)							X	
Bruker Genesis	X	X	X	X				X
Bruker 8400						X		X
Carlo Erba HS500, HS700			X				X	
Chrompack CP-9020, CP-9025, CP-9060			X					
CTC Analytics	X		X					
Dani HSS 39.50, HSS 86.50	X		X					
Dani SPT 37.50	X							
L.E.A.P.								X
Perkin-Elmer HS-100, HS-101	X							
Perkin-Elmer HS-6					X			
Perkin Elmer (Modern HS Auto Samplers)								X
Shimadzu							X	
Tekmar 7000, 7050	X	X	X	X				
Tekmar (Modern HS Auto Samplers)								X
Varian Genesis	X	X	X	X				X
Varian 8400						X		X
Other Headspace Autosamplers that do not require Transports							X	X



23 x 75 mm, **Aluminum Crimp** Kit: 392611607,
Magnetic Crimp Kit: 392611609



22 x 38 mm, **Aluminum Crimp** Kit: 392611619,
Magnetic Crimp Kit: 392611621



18 x 65 mm, **Aluminum Crimp** Kit: 392611611



20 x 38 mm, 22 x 38 mm, 23 x 46mm, **Snap Cap**
Kits: 392611975, 392611974, 392611973



23 x 46 mm, **Aluminum Crimp** Kit: 392611613,
Magnetic Crimp Kit: 392611615



23 x 46mm, 23 x 75mm, **Screw Top**, Flat
Bottom, Headspace Vial Kit (Clear/Amber)



18 x 50 mm, **Aluminum Crimp** Kit: 392611617



23 x 46mm, 23 x 75mm, **Screw Top**, Round
Bottom, Headspace Vial Kit (Clear/Amber)

Headspace Vials

Headspace Vials

Our reference chart on the previous page shows each vial's configuration, so check your autosampler's requirements so you can order compatible items.

For magnetic caps, we recommend the bimetal magnetic crimp caps since they generally provide better seals, are easier to crimp and decap using hand tools, and are compatible with electronic rechargeable vial crimpers and decappers.

All crimpers must be adjusted for the vial and cap/septa combination you are using. The crimp height needed to form a proper seal varies with flat- and bevel-top vials, the vial lip thickness, the septum thickness, and the crimp cap material. You should check the crimper adjustment with any change in the vial, septa, or cap. Only use crimpers that have a crimp depth adjustment, and all crimpers sold are adjustable.

SPME headspace applications may require softer or thinner septa to avoid fiber damage. See our note regarding SPME-compatible caps and septa.

Note regarding SPME applications: The septa in these caps are about 1/8 in. thick. SPME fibers might be damaged if the fiber is inserted too quickly, or the crimp cap is applied too tightly such that the septa material is tightly compressed. Crimp caps with 8 mm openings are preferred for SPME applications. However, we recommend the screw cap headspace vials for SPME applications as the septa are thinner.

Crimp Top Headspace Vial Kits

Kits include vials and caps with septa inserted. The caps have 8 mm openings. Flat bottom vials are not compatible with CTC headspace autosamplers. Use our round bottom crimp top or screw top vials and order the caps you need separately.



18 x 65mm 12ml Headspace Autosampler Vial Kits

- Beveled crimp seal finish for tighter septa seal
- Steel magnetic crimp caps available for LEAP/CTC
- Lot to lot quality assurance with lot number coding
- Proven performance on all major headspace instruments
- Type 1 borosilicate glass
- PTFE/ Silicone or PTFE/ molded butyl rubber septa
- Caps have 8mm opening
- Includes: Vials & Crimp Caps w/ Septa Inserted



Description	Qty	Part#	Price \$
Clear glass 12ml headspace vial 18 x 65mm; Crimp cap, 20mm silver aluminum beveled with PTFE/silicone septa	100/pk	392611611	OEM
Clear glass 12ml headspace vial 18 x 65mm; Crimp cap, 20mm silver aluminum beveled with PTFE/molded butyl septa	100/pk	392611612	OEM
18 x 65mm 12ml headspace clear glass vials only	100/pk	392611676	OEM

Headspace Vials



18 x 50 mm 9ml Headspace Autosampler Glass Vial Kits

- Beveled crimp seal finish for tighter septa seal
- Steel magnetic crimp caps available for LEAP/CTC
- Lot to lot quality assurance with lot number coding
- Proven performance on all major headspace instruments
- Type 1 borosilicate glass
- PTFE/ Silicone or PTFE/ molded butyl rubber septa
- Caps have 8mm opening
- Includes: Vials & Crimp Caps w/ Septa Inserted



Description	Qty	Part#	Price \$
Clear glass 9ml headspace vial 18 x 50mm; Crimp cap, 20mm silver aluminum beveled with PTFE/silicone septa	100/pk	392611617	OEM
Clear glass 9ml headspace vial 18 x 50mm; Crimp cap, 20mm silver aluminum beveled with PTFE/molded butyl septa	100/pk	392611618	OEM
18 x 50mm 9ml headspace clear glass vials only	100/pk	392611678	OEM



22 x 38 mm 6ml Headspace Autosampler Glass Vial Kits

- Beveled crimp seal finish for tighter septa seal
- Steel magnetic crimp caps available for LEAP/CTC
- Lot to lot quality assurance with lot number coding
- Proven performance on all major headspace instruments
- Type 1 borosilicate glass
- PTFE/ Silicone or PTFE/ molded butyl rubber septa
- Caps have 8mm opening
- Includes: Vials & Crimp Caps w/ Septa Inserted



Description	Qty	Part#	Price \$
Clear glass 6ml headspace vial 22 x 38mm; Crimp cap, 20mm silver aluminum beveled with PTFE/silicone septa	100/pk	392611619	OEM
Clear glass 6ml headspace vial 22 x 38mm; Crimp cap, 20mm silver aluminum beveled with PTFE/molded butyl septa	100/pk	392611620	OEM
Clear glass 6ml headspace vial 22 x 38mm; Magnetic steel crimp cap, 20mm with PTFE/silicone septa	100/pk	392611621	OEM
Clear glass 6ml headspace vial 22 x 38mm; Magnetic steel crimp cap, 20mm with PTFE/molded butyl septa	100/pk	392611622	OEM
22 x 38mm 6ml headspace clear glass vials only	100/pk	392611857	OEM

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Headspace Vials



23 x 46 mm 10 ml Headspace Autosampler Glass Vial Kits

- Beveled crimp seal finish for tighter septa seal
- Steel magnetic crimp caps available for LEAP/CTC
- Lot to lot quality assurance with lot number coding
- Proven performance on all major headspace instruments
- Type 1 borosilicate glass
- PTFE/ Silicone or PTFE/ molded butyl rubber septa
- Caps have 8mm opening
- Includes: Vials & Crimp Caps w/ Septa Inserted



Description	Qty	Part#	Price \$
Clear glass 10ml headspace vial 23 x 46mm; Crimp cap, 20mm silver aluminum beveled with PTFE/silicone septa	100/pk	392611613	OEM
Clear glass 10ml headspace vial 23 x 46mm; Crimp cap, 20mm silver aluminum beveled with PTFE/molded butyl septa	100/pk	392611614	OEM
Clear glass 10ml headspace vial 23x 46mm; Magnetic steel crimp cap, 20mm with PTFE/silicone septa	100/pk	392611615	OEM
Clear glass 10ml headspace vial 23 x 46mm; Magnetic steel crimp cap, 20mm with PTFE/molded butyl septa	100/pk	392611616	OEM
23 x 46mm 10ml headspace clear glass vials only	100/pk	392611677	OEM



23 x 75 mm 20 ml Headspace Autosampler Vial Kits

- Beveled crimp seal finish for tighter septa seal
- Steel magnetic crimp caps available for LEAP/CTC
- Lot to lot quality assurance with lot number coding
- Proven performance on all major headspace instruments
- Type 1 borosilicate glass
- PTFE/ Silicone or PTFE/ Molded butyl rubber septa
- Caps have 8mm opening
- Includes: Vials & Crimp Caps w/ Septa Inserted



Description	Qty	Part#	Price \$
Kit contains: Clear 20ml vials; 20mm beige Teflon faced silicone septa; 20mm silver aluminum beveled open top crimp cap	1000/pk	392604600	OEM
Clear glass 20ml headspace vial 23 x 75mm; Crimp cap, 20mm silver aluminum beveled with PTFE/silicone septa pre-inserted	100/pk	392611607	OEM
Clear glass 20ml headspace vial 23 x 75mm; Crimp cap, 20mm silver aluminum beveled with PTFE/molded butyl septa pre-inserted	100/pk	392611608	OEM
Clear glass 20ml headspace vial 23 x 75mm; Magnetic steel crimp cap, 20mm with PTFE/silicone septa pre-inserted	100/pk	392611609	OEM
Clear glass 20ml headspace vial 23 x 75mm; Magnetic steel crimp cap, 20mm with PTFE/molded butyl septa pre-inserted	100/pk	392611610	OEM
23 x 75mm 20ml headspace clear glass vials only	100/pk	392611675	OEM

Headspace Vials

Crimp Top Headspace Vial Kits w/ Bi-Metal Caps

- Beveled & Flat Crimp Seal Vial Finish
- Lot to lot quality assurance with lot number coding
- Proven performance on all major headspace instruments
- Type 1 borosilicate glass
- PTFE/ Silicone or PTFE/ molded butyl rubber septa
- Caps have 8mm opening
- Includes: Vials & Crimp Caps w/ Septa Inserted



Volume (mL)	Vial OD x Height (mm)	Vial Material	Vial Top	Vial Bottom	Septa Material	Qty	Bi-Metal Magnetic 20mm Crimp Cap	Price \$
6	22 mm x 38	Clear Glass	Bevel	Flat	Silicone/PTFE	100	392611619-BM	OEM
6	22 mm x 38	Clear Glass	Bevel	Flat	Butyl/PTFE	100	392611620-BM	OEM
9	18 mm x 50	Clear Glass	Flat	Flat	Silicone/PTFE	100	392611617-BM	OEM
9	18 mm x 50	Clear Glass	Flat	Flat	Butyl/PTFE	100	392611618-BM	OEM
10	23 mm x 46	Clear Glass	Bevel	Flat	Silicone/PTFE	100	392611613-BM	OEM
10	23 mm x 46	Clear Glass	Bevel	Flat	Butyl/PTFE	100	392611614-BM	OEM
12	18 mm x 65	Clear Glass	Flat	Flat	Silicone/PTFE	100	392611611-BM	OEM
12	18 mm x 65	Clear Glass	Flat	Flat	Butyl/PTFE	100	392611612-BM	OEM
20	23 mm x 75	Clear Glass	Bevel	Flat	Silicone/PTFE	100	392611607-BM	OEM
20	23 mm x 75	Clear Glass	Bevel	Flat	Butyl/PTFE	100	392611608-BM	OEM

Crimp Top Headspace Vial Kits w/ Aluminum Caps

- Beveled & Flat Crimp Seal Vial Finish
- Lot to lot quality assurance with lot number coding
- Proven performance on all major headspace instruments
- Type 1 borosilicate glass
- PTFE/ Silicone or PTFE/ molded butyl rubber septa
- Caps have 8mm opening
- Includes: Vials & Crimp Caps w/ Septa Inserted



Volume (mL)	Vial OD x Height (mm)	Vial Material	Vial Top	Vial Bottom	Septa Material	Qty	Aluminum 20mm Crimp Cap	Price \$
6	22 mm x 38	Clear Glass	Bevel	Flat	Silicone/PTFE	100	392611619	OEM
6	22 mm x 38	Clear Glass	Bevel	Flat	Butyl/PTFE	100	392611620	OEM
9	18 mm x 50	Clear Glass	Flat	Flat	Silicone/PTFE	100	392611617	OEM
9	18 mm x 50	Clear Glass	Flat	Flat	Butyl/PTFE	100	392611618	OEM
10	23 mm x 46	Clear Glass	Bevel	Flat	Silicone/PTFE	100	392611613	OEM
10	23 mm x 46	Clear Glass	Bevel	Flat	Butyl/PTFE	100	392611614	OEM
12	18 mm x 65	Clear Glass	Flat	Flat	Silicone/PTFE	100	392611611	OEM
12	18 mm x 65	Clear Glass	Flat	Flat	Butyl/PTFE	100	392611612	OEM
20	23 mm x 75	Clear Glass	Bevel	Flat	Silicone/PTFE	100	392611607	OEM
20	23 mm x 75	Clear Glass	Bevel	Flat	Butyl/PTFE	100	392611608	OEM

Headspace Vials

Crimp Top Headspace Vial Kits w/ Magnetic Steel Caps

- Beveled & Flat Crimp Seal Vial Finish
- Steel magnetic crimp caps available for LEAP/CTC
- Lot to lot quality assurance with lot number coding
- Proven performance on all major headspace instruments
- Type 1 borosilicate glass
- PTFE/ Silicone or PTFE/ molded butyl rubber septa
- Replacement 20 mm crimp caps available
- Caps have 8mm opening
- Includes: Vials & Crimp Caps w/ Septa Inserted



Volume (mL)	Vial OD x Height (mm)	Vial Material	Vial Top	Vial Bottom	Septa Material	Qty	Magnetic Steel 20mm Crimp Cap	Price \$
6	22 mm x 38	Clear Glass	Bevel	Flat	Silicone/PTFE	100	392611621	OEM
6	22 mm x 38	Clear Glass	Bevel	Flat	Butyl/PTFE	100	392611622	OEM
9	18 mm x 50	Clear Glass	Flat	Flat	Silicone/PTFE	100	392611617-MS	OEM
9	18 mm x 50	Clear Glass	Flat	Flat	Butyl/PTFE	100	392611618-MS	OEM
10	23 mm x 46	Clear Glass	Bevel	Flat	Silicone/PTFE	100	392611615	OEM
10	23 mm x 46	Clear Glass	Bevel	Flat	Butyl/PTFE	100	392611616	OEM
12	18 mm x 65	Clear Glass	Flat	Flat	Silicone/PTFE	100	392611611-MS	OEM
12	18 mm x 65	Clear Glass	Flat	Flat	Butyl/PTFE	100	392611612-MS	OEM
20	23 mm x 75	Clear Glass	Bevel	Flat	Silicone/PTFE	100	392611609	OEM
20	23 mm x 75	Clear Glass	Bevel	Flat	Butyl/PTFE	100	392611610	OEM

Crimp Top Amber Glass Headspace Vials

- Order caps with septa separately
- Round-bottom vials are compatible with CTC headspace autosamplers
- Steel magnetic crimp caps available for LEAP/CTC
- Lot to lot quality assurance with lot number coding
- Proven performance on all major headspace instruments
- Type 1 borosilicate glass



Volume (mL)	Top	Bottom	Qty	Amber Glass	Price \$
10	Bevel	Round	100/Pk	392620526	OEM
10	Bevel	Round	1000/Case	392620527	OEM
20	Bevel	Round	100 /Pk	392620528	OEM
20	Bevel	Round	1000/Case	392620529	OEM

Headspace Vials

Crimp Top Clear Glass Headspace Vials

- Order caps with septa separately
- Round-bottom vials are compatible with CTC headspace autosamplers
- Steel magnetic crimp caps available for LEAP/CTC
- Lot to lot quality assurance with lot number coding
- Proven performance on all major headspace instruments
- Type 1 borosilicate glass



Volume (mL)	Vial OD x Height	Top	Bottom	Qty	Clear Glass	Price \$
6	22 mm x 38	Bevel	Flat	100 /Pk	392611857	OEM
9	18 mm x 50	Flat	Flat	100/Pk	392611678	OEM
10	23 mm x 46	Bevel	Flat	100/Pk	392611677	OEM
10	23 mm x 46	Bevel	Round	100/Pk	392612033	OEM
10	23 mm x 46	Bevel	Round	1000/Case	392612033-10	OEM
10	23 mm x 46	Flat	Round	100 /Pk	392612020	OEM
12	18 mm x 65	Flat	Flat	100/Pk	392611676	OEM
20	23 mm x 75	Bevel	Flat	100 /Pk	392611675	OEM
20	23 mm x 75	Bevel	Round	100 /Pk	392612034	OEM
20	23 mm x 75	Bevel	Round	1000/Case	392612034-10	OEM

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Headspace Vials

20 mm Crimp Cap w/ Silicone

- Excellent protection of sample
- Pure Silicone rubber faced w/ PTFE
- Available in Aluminum, Magnetic Bi-Metal, & Magnetic Steel



Cap Material	Opening	Qty	Silicone/PTFE	Price \$
Aluminum	5 mm	100/pk	392611858	OEM
Bi-metal Magnetic	8 mm	100/pk	392612017	OEM
Steel Magnetic	5 mm	100/pk	392611860	OEM

20 mm Crimp Cap w/ Teflon Butyl

- Available in Aluminum, Magnetic Bi-Metal, & Magnetic Steel
- Chlorobutyl rubber faced w/ PTFE
- Superior sample protection
- Only PTFE contacts the samples



Cap Material	Opening	Quantity	Butyl/PTFE	Price \$
Aluminum	5 mm	100/pk	392611859	OEM
Bi-metal Magnetic	8 mm	100/pk	392612017-B	OEM
Steel Magnetic	5 mm	100/pk	392611860-B	OEM

20 mm Crimpers & Decappers

- Easy to use
- Permits minor handle pressure
- Adjustable crimping depth
- Decapper removes crimped seals from vials



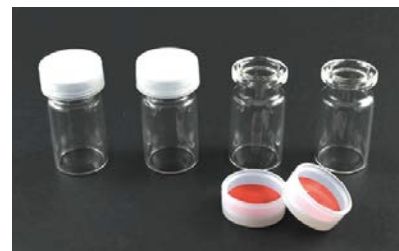
Description	Qty	Part#	Price \$
Adjustable hand crimper for 20 mm crimp top vials	1/pk	392612019	OEM
Adjustable hand crimper for 20 mm crimp top vials	1/pk	AL666020	OEM
Hand Decapper for 20 mm crimp top vials	1/pk	AL98719	OEM

Headspace Vials



5 & 10 mL Snap Top Headspace Vial Kits

- Used for large samples or solvents
- Polyethylene 20mm caps have 8mm opening
- Teflon/Silicone Septa
- CP-8410

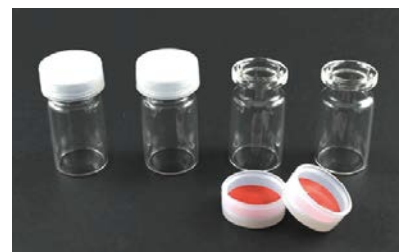


Description	OD	Length	Qty.	Part#	Price \$
5 mL Solvent Vials & CP-8410 Sample Vials w/ 20 mm Snap Tops & Septa	20 mm	38 mm	50/pk	392611975	OEM
	20 mm	38 mm	100/pk	392611974	OEM
10 mL CP-8410 Sample Vials w/ 20 mm Snap Tops & Septa	23 mm	46 mm	50/pk	392611973	OEM
			100/pk	392611972	OEM
Vial Starter Pack			1 ea	392611971	OEM
Includes: 2mL (10ea), 5mL (6ea), & 10mL (5ea) Vials w/ Caps & Septa					



20 x 38 mm, 5 mL Snap Top Headspace Vial Kits

- Easy to use polyethylene snap caps
- Polyethylene 20mm caps have 8mm opening
- For use in the Varian 8400 as solvent vials



Description	Qty	Part#	Price \$
Solvent vials w/ Polyethylene snap tops & Teflon/Silicone septa	4/Pk	392611970	OEM



22 x 46 mm, 10 mL Headspace Vials, Snap Tops, & Bi-metal Crimp Caps

- Clear Glass Vials
- Bi-metal Magnetic Crimp Cap/Septa
- Polyethylene 20mm Snap Top Caps/Septa
- Caps have 8mm opening



Description	Qty	Part#	Price \$
10-CV, 10 mL, Clear Vials only	100/Pk	392611677	OEM
20-ACB crimp cap and seal for 10-CV vial, Bi-metal magnetic 20mm w/ Teflon/Silicone Septa	100/Pk	392612017	OEM



20 mm Polyethylene Snap Tops & Septa

- Pre-inserted septa save time and reduce contamination
- Polyethylene Snap Tops have 8mm opening
- Teflon faced silicone septa



Description	Qty	Part#	Price \$
20 mm Snap Top with Red Teflon/White Silicone Septa Pre-Inserted	50/pk	392612009	OEM
.060" Thick, Red Teflon/White Silicone Septa for 20mm Snap Tops	50/pk	392612011	OEM
	100/pk	392611989	OEM

Headspace Vials

GC/MS Ultra Sensitive Snap Top Headspace Vial Kits & Accessories

- For GC/MS & other highly sensitive detectors
- GC/MS Ultra High Sensitive septa are specially prepared from high purity silicone and ultra clean PTFE (Teflon) to provide ultra low levels of contaminants to minimize interference with the analysis
- Has been qualified by a Major Chromatography Company using State-Of-The-Art GC/MS technology
- Ideal for Large Samples or Solvents



20 mm Ultra Headspace Vial Kits

- Type 1 Borosilicate Glass Vials
- Packaged in Ultra Clean White Non-Plastic Trays
- Septa & Caps packaged in Ultra Clean "Tested" Foil
- Polyethylene Snap Tops with 8mm hole



Description	Qty	Part#	Price \$
5ml Ultra Solvent Vial Kit, Includes: Vials & Snap Tops w/ Ultra Septa Pre-inserted, 20x 38mm	4/pk	392611980	OEM
	50/pk	392611981	OEM
	100/pk	392611982	OEM
10ml Ultra Vial Kit, Includes: Vials & Snap Tops w/ Ultra Septa Pre-inserted, 22 x 46mm	50/pk	392612006	OEM
	100/pk	392612007	OEM
Ultra Vial Starter Pack Contains 2ml (10 ea.), 5ml (6 ea.) and 10ml (5 ea.) Vials and Caps w/ Septa	1 ea.	392611978	OEM



20 mm Ultra Headspace Vials

- Type 1 Borosilicate Glass Vials
- Packaged in Ultra Clean White Non-Plastic Trays



Description	Qty	Part#	Price \$
5ml Ultra Vials, 20 x 38 mm (Vials only)	50/pk	392611980US	OEM
	100/pk	392611980-10US	
10ml Ultra Vials, 22 x 46 mm (Vial only)	50/pk	392611983US	OEM
	100/pk	392611983-10US	



20 mm Ultra GC/MS Snap Tops and Septa

- Pre-inserted septa save time and reduce contamination
- Polyethylene Snap Tops have 8mm opening
- Packaged in Ultra Clean "Tested" Foil



Description	Qty	Part#	Price \$
20 mm Snap Tops, 6 mm hole, Ultra GC/MS Septa	50/pk	392611984	OEM
Ultra GC/MS Septa for 20 mm Snap Tops	50/pk	392611986	OEM
	100/pk	392611988	OEM

Headspace Vials

Screw Top Standard Headspace Vials with Flat Bottoms

- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Perkin Elmer, Carlo Erba, Shimadzu, and Agilent)
- Easy-to-Seal Vials; Caps have 8mm opening
- Good and bad seals can be felt by hand and corrected before analysis
- No crimper to adjust
- The 1.3 mm Silicone/PTFE septa are recommended for SPME applications



Kits: 20mL Clear Glass Screw Top Headspace Kits (18mm)

- Includes: Vials & Crimp Caps w/ Septa Inserted
- Flat Bottom Vials



Volume	Vial OD x Height	Septa	Thickness	Septa Color	Qty	Part No.	Price \$
20 mL	23 x 75 mm	Silicone/PTFE	1.3 mm	White/light blue PTFE	100/pk	392620401	OEM
20 mL	23 x 75 mm	Silicone/PTFE	1.5 mm	White/darklight blue PTFE	100/pk	392620403	OEM
20 mL	23 x 75 mm	Butyl/PTFE	1.6 mm	Black/red PTFE	100/pk	392620405	OEM



Kits: 20mL Amber Glass Screw Top Headspace Kits (18mm)

- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Perkin Elmer, Carlo Erba, Shimadzu, and Agilent)
- Includes: Vials & Crimp Caps w/ Septa Inserted
- Flat Bottom Vials



Volume	Vial OD x Height	Septa	Thickness	Septa Color	Qty	Part No.	Price \$
20 mL	23 x 75 mm	Silicone/PTFE	1.3 mm	White/light blue PTFE	100/pk	392620401A	OEM
20 mL	23 x 75 mm	Silicone/PTFE	1.5 mm	White/darklight blue PTFE	100/pk	392620403A	OEM
20 mL	23 x 75 mm	Butyl/PTFE	1.6 mm	Black/red PTFE	100/pk	392620405A	OEM



Kits: 10mL Clear Glass Screw Top Headspace Kits (18mm)

- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Perkin Elmer, Carlo Erba, Shimadzu, and Agilent)
- Includes: Vials & Crimp Caps w/ Septa Inserted
- Flat Bottom Vials



Volume	Vial OD x Height	Septa	Thickness	Septa Color	Qty	Part No.	Price \$
10 mL	23 x 46 mm	Silicone/PTFE	1.3 mm	White/light blue PTFE	100/pk	392620401-10	OEM
10 mL	23 x 46 mm	Silicone/PTFE	1.5 mm	White/darklight blue PTFE	100/pk	392620403-10	OEM
10 mL	23 x 46 mm	Butyl/PTFE	1.6 mm	Black/red PTFE	100/pk	392620405-10	OEM

Headspace Vials



Kits: 10mL Amber Glass Screw Top Headspace Kits (18mm)

- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Perkin Elmer, Carlo Erba, Shimadzu, and Agilent)
- Includes: Vials & Crimp Caps w/ Septa Inserted
- Flat Bottom Vials



Volume	Vial OD x Height	Septa	Thickness	Septa Color	Qty	Part No.	Price \$
10 mL	23 x 46 mm	Silicone/PTFE	1.3 mm	White/light blue PTFE	100/pk	392620401-10A	OEM
10 mL	23 x 46 mm	Silicone/PTFE	1.5 mm	White/darklight blue PTFE	100/pk	392620403-10A	OEM
10 mL	23 x 46 mm	Butyl/PTFE	1.6 mm	Black/red PTFE	100/pk	392620405-10A	OEM



Screw Top Headspace Amber/Clear Vials (18mm)

- Vials Only (Flat Bottom)
- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Varian, L.E.A.P., Tekmar, and Perkin Elmer)
- Easy to seal vials (no crimper needed to adjust)
- Borosilicate glass



Volume	Vial OD x Height	Vial Material	Qty	Part No.	Price \$
10 mL	23 x 46 mm	Amber Glass	100/pk	392620104	OEM
10 mL	23 x 46 mm	Clear Glass	100/pk	392620102	OEM
20 mL	23 x 75 mm	Amber Glass	100/pk	392620204	OEM
20 mL	23 x 75 mm	Clear Glass	100/pk	392620202	OEM



Caps: Screw Tops with Septa (18mm)

- Caps have 8mm opening
- Caps with septa pre-inserted
- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Varian, L.E.A.P., Tekmar, and Perkin Elmer)
- Fits screw top headspace vials



Septa	Thickness	Septa Color	Qty	Part No.	Price \$
Viton	1.0 mm	Black	100/pk	392620308	OEM
Silicone/PTFE	1.3 mm	White/ light blue PTFE	100/pk	392620302	OEM
Silicone/PTFE	1.5 mm	White/ darklight blue PTFE	100/pk	392620304	OEM
Butyl/PTFE	1.6 mm	Black/red PTFE	100/pk	392620306	OEM

Headspace Vials

Screw Top European Headspace Vials with Rounded Bottoms

- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Varian, L.E.A.P., Tekmar, and Perkin Elmer)
- Screw top headspace vials are easier to seal; No crimper to adjust
- Good and bad seals can be felt by hand, and corrected before analysis
- The 1.3 mm Silicone/PTFE septa are recommended for SPME applications
- Caps have 8mm opening



Kits: 20mL Clear Glass Screw Top Headspace Kits (18mm)

- Includes: Vials & Crimp Caps w/ Septa Inserted
- Rounded Bottom Vials



Volume	Vial OD x Height	Septa	Thickness	Septa Color	Qty	Part No.	Price \$
20 mL	23 x 75 mm	Silicone/PTFE	1.3 mm	White/light blue PTFE	100/pk	392620401E	OEM
20 mL	23 x 75 mm	Silicone/PTFE	1.5 mm	White/darklight blue PTFE	100/pk	392620403E	OEM
20 mL	23 x 75 mm	Butyl/PTFE	1.6 mm	Black/red PTFE	100/pk	392620405E	OEM



Kits: 20mL Amber Glass Screw Top Headspace Kits (18mm)

- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Varian, L.E.A.P., Tekmar, and Perkin Elmer)
- Includes: Vials & Crimp Caps w/ Septa Inserted
- Rounded Bottom Vials



Volume	Vial OD x Height	Septa	Thickness	Septa Color	Qty	Part No.	Price \$
20 mL	23 x 75 mm	Silicone/PTFE	1.3 mm	White/light blue PTFE	100/pk	392620401AE	OEM
20 mL	23 x 75 mm	Silicone/PTFE	1.5 mm	White/darklight blue PTFE	100/pk	392620403AE	OEM
20 mL	23 x 75 mm	Butyl/PTFE	1.6 mm	Black/red PTFE	100/pk	392620405AE	OEM



Kits: 10mL Clear Glass Screw Top Headspace Kits (18mm)

- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Varian, L.E.A.P., Tekmar, and Perkin Elmer)
- Includes: Vials & Crimp Caps w/ Septa Inserted
- Rounded Bottom Vials



Volume	Vial OD x Height	Septa	Thickness	Septa Color	Qty	Part No.	Price \$
10 mL	23 x 46 mm	Silicone/PTFE	1.3 mm	White/light blue PTFE	100/pk	392620401-10CE	OEM
10 mL	23 x 46 mm	Silicone/PTFE	1.5 mm	White/darklight blue PTFE	100/pk	392620403-10CE	OEM
10 mL	23 x 46 mm	Butyl/PTFE	1.6 mm	Black/red PTFE	100/pk	392620405-10CE	OEM

Headspace Vials



Kits: 10mL Amber Glass Screw Top Headspace Kits (18mm)

- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Varian, L.E.A.P., Tekmar, and Perkin Elmer)
- Includes: Vials & Crimp Caps w/ Septa Inserted
- Rounded Bottom Vials



Volume	Vial OD x Height	Septa	Thickness	Septa Color	Qty	Part No.	Price \$
10 mL	23 x 46 mm	Silicone/PTFE	1.3 mm	White/light blue PTFE	100/pk	392620401-10AE	OEM
10 mL	23 x 46 mm	Silicone/PTFE	1.5 mm	White/darklight blue PTFE	100/pk	392620403-10AE	OEM
10 mL	23 x 46 mm	Butyl/PTFE	1.6 mm	Black/red PTFE	100/pk	392620405-10AE	OEM



Screw Top Headspace Amber/Clear Vials (18mm)

- Vials Only (Rounded Bottom)
- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Varian, L.E.A.P., Tekmar, and Perkin Elmer)
- Easy to seal vials (no crimper needed to adjust)
- Borosilicate glass



Volume	Vial OD x Height	Vial Material	Qty	Part No.	Price \$
10 mL	23 x 46 mm	Amber Glass	100/pk	392620104E	OEM
10 mL	23 x 46 mm	Clear Glass	100/pk	392620102E	OEM
20 mL	23 x 75 mm	Amber Glass	100/pk	392620204E	OEM
20 mL	23 x 75 mm	Clear Glass	100/pk	392620202E	OEM



Caps: Screw Tops with Septa (18mm)

- Caps have 8mm opening
- Caps with septa pre-inserted
- Excellent Performance on all CTC Analytics Systems Requiring Magnet Compatible Closures (i.e. Varian, L.E.A.P., Tekmar, and Perkin Elmer)
- Fits screw top headspace vials



Septa	Thickness	Septa Color	Qty	Part No.	Price \$
Viton	1.0 mm	Black	100/pk	392620308	OEM
Silicone/PTFE	1.3 mm	White/ light blue PTFE	100/pk	392620302	OEM
Silicone/PTFE	1.5 mm	White/ darklight blue PTFE	100/pk	392620304	OEM
Butyl/PTFE	1.6 mm	Black/red PTFE	100/pk	392620306	OEM

Glass Fabrication

- ♦ Chromatography
- ♦ Electronics
- ♦ Laboratory
- ♦ OEM
- ♦ Experimental
- ♦ Custom/Specialty

Glass Fabrication

Custom Glass Fabrication

We offer a wide array of glass fabrication products made to your specifications. With over 70 years of glass blowing experience, we can meet all of your custom glass needs.

We offer the following glass fabrication services:

- Mold work of all types
- Gas chromatography glass coil (multiple configurations)
- Tooling of standard glass products
- Tooling of specialty items
- Glass cutting of standard rod tubing
- Plate fabrication work
- Safety glass plate work
- Drilling of holes in glass tubing & plates
- Manufacturing of scientific glassware used in research laboratories & schools
- Evacuation forming of glass products
- Ampules manufactured from clear or amber glass



X-ray Glass

- Wafer Stems
- Headers
- Kovar Pinches
- Tungsten Pinches
- Dumet Wire Pinches
- Nickel Pinches
- Graded Seals
- Blown Glass Frames for X-ray Tubes and Other Applications

Metal to Glass

- Kovar
- Copper
- Ceramic
- Platinum
- Tungsten
- Nickel
- Dumet Wire

Types of Glass

- Borosilicate
- Soda-lime
- Lead
- Quartz
- 8245 & 8250
- All Electronic Glass

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Specialty GC & GC/MS Products

Specialty GC & GC/MS

Glass & Protection Fronts

- Available in Borosilicate Glass or Clear Polycarbonate
- Borosilicate Glass is Cleaned & Packaged Using Our Proprietary Process
- Fit Bruker Instruments
- For GC/MS Applications



Description	Qty	Part#	Price \$
Glass Front, Borosilicate Glass - 0.250" Thick x 6.65" L x 2.91" W	5/pk	394034501-5	OEM
Protection Front, Clear Polycarbonate - 0.125" Thick x 6.65" L x 2.91" W	5/pk	394034601-5	OEM

Cal-Gas Chambers

- Borosilicate Glass
- Fits Bruker, Varian, & Agilent Instruments
- Available with or without internal stem



Description	Qty	Part#	Price \$
Cal-Gas Chamber, Borosilicate Glass, 0.75" Bulb, w/ Internal Tapered Stem	5/pk	CUB02-00074-5	OEM
Cal-Gas Chamber, Borosilicate Glass, 1.0" Bulb, No Stem	5/pk	392027000-5	OEM

Glass Tekmar Spargers

- 5ml & 25ml Spargers Available
- Available with and without Frit
- Borosilicate Glass
- Fits Tekmar LSC 2000 & 3000, ALS 20 & 2016
- Glassware Only



Description	Qty	Part#	Price \$
5ml Fritted Sparger	2/pk	99764210-2	OEM
25ml Fritted Sparger	2/pk	99764211-2	
5ml Fritless Sparger	2/pk	99764212-2	OEM
25ml Fritless Sparger	2/pk	99764213-2	

Aluminum Oxide Powder

- Cleaning and Maintenance For GC/MS
- Specialty Abrasive Powder
- Mass Spectrometer Cleaning
- Recommended By Major Instrument Manufacturers
- Packaged in Glass Wide Mouth Bottle



Description	Qty	Part#	Price \$
Aluminum Oxide Powder, 100g	1/pk	393706201	OEM

Wire Column Racks

- ♦ For Capillary & Glass Columns
- ♦ Agilent
- ♦ Bruker
- ♦ Varian

Wire Column Racks

Our column racks fit fused silica capillary and glass coiled columns. These unique designs allow minimal metal-to-column contact that reduces the possibility of damaging the protective coating on capillary columns. Additionally, the design makes it easy to hang columns in most GC ovens- especially in Bruker, Agilent and Varian Gas Chromatographs.

Wire Column Rack

- Use with Agilent, Bruker, and Varian Gas Chromatographs
- .125" (3.175 mm) O.D. Wire
- 304 Stainless Steel Wire Construction



Description	Qty	Part No.	Price \$
Column Wire Rack Assembly, 450-GC, A-Frame	1/pk	392524701	OEM
	5/pk	392524701-5	

Wire Column Rack

- Use with Agilent, Bruker, and Varian Gas Chromatographs
- .125" (3.175 mm) O.D. Wire
- 304 Stainless Steel Wire Construction



Description	Qty	Part No.	Price \$
MN Rack, Special Valve	1/pk	392524702	OEM
	5/pk	392524702-5	

Wire Column Rack

- Use with Agilent, Bruker, and Varian Gas Chromatographs
- .125" (3.175 mm) O.D. Wire
- 304 Stainless Steel Wire Construction



Description	Qty	Part No.	Price \$
Column Rack Assembly	1/pk	393315101	OEM
	5/pk	393315101-5	

Wire Column Racks

Wire Column Rack

- Use with Agilent, Bruker, and Varian Gas Chromatographs
- .125" (3.175 mm) O.D. Wire
- 304 Stainless Steel Wire Construction



Description	Qty	Part No.	Price \$
Varian 3900 Column Stand	1/pk	393321901	OEM
	5/pk	393321901-5	

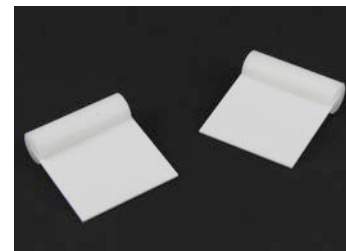
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Ceramic Scoring Wafers

Ceramic Scoring Wafers

Ceramic Scoring Wafers w/ Grip Handle

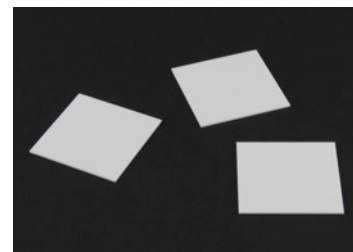
- High Quality Ceramic Cutting Tool for Cutting Fused Silica Columns
- Removable Delrin Gripping Handle for Ease of use
- Four Straight Scoring Edges
- Available with Name and Logo Imprinted on Wafer
- Excellent Trade Show Promotional Item



Description	Qty	Part#	Price \$
High Quality Ceramic Scoring Tool for Cutting Fused Silica Columns, 1" x 1" with Delrin Gripping Handle	5/pk	190015800-5	OEM
High Quality Ceramic Scoring Tool for Cutting Fused Silica Columns, 1" x 1" with Delrin Gripping Handle	5/pk	392612037-5	OEM

Ceramic Scoring Wafers

- High Quality Ceramic Cutting Tool for Cutting Fused Silica Columns
- Four Straight Scoring Edges
- Available with Name and Logo Imprinted on Wafer
- Excellent Trade Show Promotional Item



Description	Qty	Part#	Price \$
High Quality Ceramic Scoring Tool for Cutting Fused Silica Columns, 1" x 1"	5/pk	190015800NH-5	OEM
High Quality Ceramic Scoring Tool for Cutting Fused Silica Columns, 1" x 1"	5/pk	392612037NH-5	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

GC/HPLC Custom Tubing

- ♦ Aluminum
- ♦ Copper
- ♦ FEP
- ♦ Hypodermic Stainless Steel Needle
- ♦ Inconel
- ♦ 304 Stainless Steel
- ♦ 316 Stainless Steel
- ♦ Teflon Coated Aluminum
- ♦ Teflon Coated Stainless Steel
- ♦ Straight Cut
- ♦ Bent/Formed
- ♦ Slotted
- ♦ Flared
- ♦ Threaded

Aluminum Tubing

Aluminum Straight Cut Tubing

- Available In Straight Cut Lengths
- Various Outside and Inside Diameters
- Economical Choice for Gas Transfer Lines
- Specify Tubing Length & I.D. when ordering



Description	Qty	Part No.	Price \$
Aluminum Straight Cut Tubing 1/8" O.D.	Custom	C23007	OEM
Aluminum Straight Cut Tubing 1/4" O.D.	Custom	C23008	OEM

Aluminum Bent/Formed Tubing

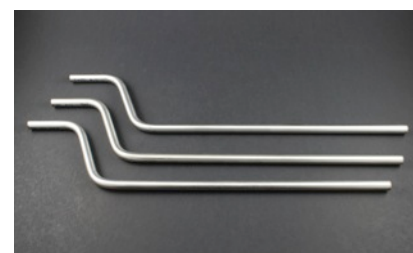
- Available In Bent Shapes and Coils
- Various Outside and Inside Diameters
- Use for Coiled or Bent Gas Transfer Lines
- Specify Bend (w/ print), Length, & O.D./I.D. when ordering



Description	Qty	Part No.	Price \$
Aluminum Bent/Formed Tubing 1/8" O.D.	Custom	C23009	OEM
Aluminum Bent/Formed Tubing 1/4" O.D.	Custom	C23010	OEM

Aluminum Tubing Teflon Lined Bent/Formed

- Available In Bent Shapes and Coils
- Chemically Deposited Interior Coated with Teflon (PTFE)
- Free From Interior Pinholes
- Coating Thickness Approximately 0.001"
- Requires Preconditioning Before Use With Chromatography Applications
- Specify Bend (w/ print) & Length when ordering



Description	Qty	Part No.	Price \$
Teflon Lined Aluminum Bent/Formed Tubing 1/8" O.D. x 0.075" I.D.	Custom	C23005	OEM
Teflon Lined Aluminum Bent/Formed Tubing 1/4" O.D. x 0.188" I.D.	Custom	C23006	OEM

Aluminum Tubing

Aluminum Tubing Teflon Lined Straight Cut

- Available In Straight Cut Lengths
- Chemically Deposited Interior Coated with Teflon (PTFE)
- Free From Interior Pinholes
- Coating Thickness Approximately 0.001"
- Requires Preconditioning Before Use With Chromatography Applications
- Specify Length when ordering



Description	Qty	Part No.	Price \$
Teflon Lined Aluminum Tubing 1/8" O.D. x 0.075" I.D.	Custom	C23000	OEM
Teflon Lined Aluminum Tubing 1/4" O.D. x 0.188" I.D.	Custom	C23001	OEM

Aluminum "Special Finish" Beveled Tubing

- Several Lengths Available
- Special Finished Bevel Surface
- Smooth Transition on Bevel Surface
- Various Outside and Inside Diameters
- Specify Length, Tubing Size, & O.D./I.D. with print when ordering



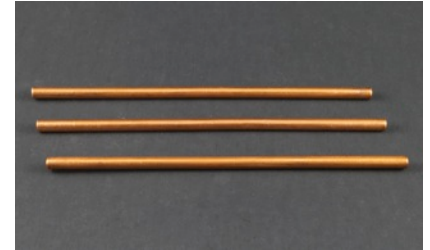
Description	Qty	Part No.	Price \$
Aluminum Beveled Special Finished Tube	Custom	C23004	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Copper Tubing

Copper Straight Cut Tubing

- Available In Straight Cut Lengths
- Various Outside and Inside Diameters
- Economical Choice for Gas Transfer Lines
- Specify Length & I.D. when ordering



Description	Qty	Part No.	Price \$
Copper Straight Cut Tubing 1/8" O.D.	Custom	C23011	OEM
Copper Straight Cut Tubing 1/4" O.D.	Custom	C23012	OEM

Copper Bent/Formed Tubing

- Available In Bent Shapes and Coils
- Various Outside and Inside Diameters
- Use for Coiled or Bent Gas Transfer Lines
- Specify Bend (w/ print), Length, & O.D./I.D. when ordering



Description	Qty	Part No.	Price \$
Copper Bent/Formed Tubing 1/8" O.D.	Custom	C23013	OEM
Copper Bent/Formed Tubing 1/4" O.D.	Custom	C23014	OEM

Copper "Special Finished" Beveled Tubing

- Several Lengths Available
- Special Finished Bevel Surface
- Smooth Transition on Bevel Surface
- Various Outside and Inside Diameters
- Specify Length, Tubing Size, & O.D./I.D. with print when ordering



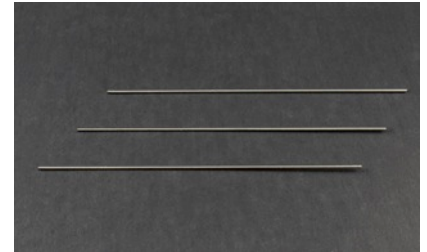
Description	Qty	Part No.	Price \$
Copper Beveled Special Finished Tube	Custom	C23015	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Hypodermic SS Tubing

Hypodermic Needle Stainless Steel Straight Cut Tubing

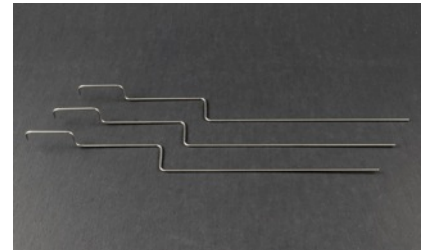
- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Micro Transfer Lines
- Available in 304 and 316 SS
- Specify Length, Size, & Tubing Type when ordering



Description	Qty	Part No.	Price \$
Hypodermic Needle Stainless Steel Straight Cut Tubing	Custom	C23030	OEM

Hypodermic Needle Stainless Steel Bent/Formatted Tubing

- Available In Bent Shapes and Coils
- Various Outside and Inside Diameters
- Use for Micro Transfer Lines
- Available in 304 and 316 SS
- Specify Bend (w/ print), Length, & O.D./I.D. when ordering



Description	Qty	Part No.	Price \$
Hypodermic Needle Stainless Steel Bent/Formatted Tubing	Custom	C23031	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

304 SS Tubing

304 Stainless Steel Straight Cut Tubing

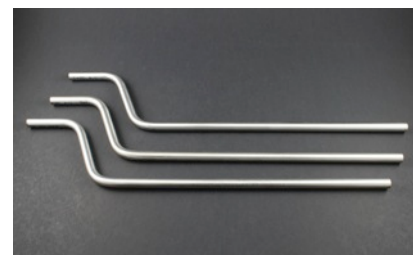
- Available In Straight Cut Lengths
- Various Outside and Inside Diameters
- Excellent Choice For Gas Transfer Lines
- Specify Length & I.D. when ordering



Description	Qty	Part No.	Price \$
304 Stainless Steel Straight Cut Tubing 1/8" O.D.	Custom	C23022	OEM
304 Stainless Steel Straight Cut Tubing 1/4" O.D.	Custom	C23023	OEM

304 Stainless Steel Bent/Formatted Tubing

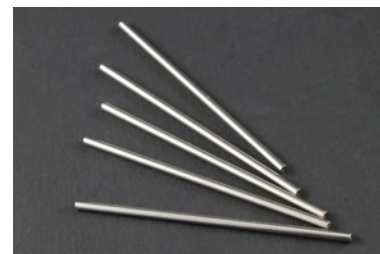
- Available In Bent Shapes and Coils
- Various Outside and Inside Diameters
- Use for Coiled or Bent Gas Transfer Lines
- Specify Bend (w/ print), Length, & O.D./I.D. when ordering



Description	Qty	Part No.	Price \$
304 Stainless Steel Bent/Formatted Tubing 1/8" O.D.	Custom	C23024	OEM
304 Stainless Steel Bent/Formatted Tubing 1/4" O.D.	Custom	C23025	OEM

304 Stainless Steel Teflon Lined Tubing Straight Cut

- Available In Straight Cut Lengths
- Chemically Deposited Interior Coated with Teflon (PTFE)
- Free From Interior Pinholes
- Coating Thickness Approximately 0.001"
- Requires Preconditioning Before Use With Chromatography Applications
- Sturdy Stainless Steel Tube
- Specify Length when ordering

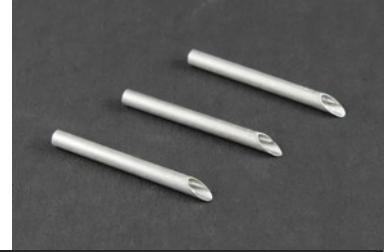


Description	Qty	Part No.	Price \$
304 Stainless Steel Teflon Lined Straight Cut Tubing 1/8" O.D. x 0.083" I.D.	Custom	C23016	OEM
304 Stainless Steel Teflon Lined Straight Cut Tubing 1/4" O.D. x 0.208" I.D.	Custom	C23017	OEM

304 SS Tubing

304 Stainless Steel “Special Finish” Beveled Tubing

- Several Lengths Available
- Special Finished Bevel Surface
- Smooth Transition on Bevel Surface
- Various Outside and Inside Diameters
- Specify Length, Tubing Size, & O.D./I.D. with print when ordering



Description	Qty	Part No.	Price \$
304 Stainless Steel Beveled Special Finished Tube	Custom	C23020	OEM

304 Stainless Steel “Threaded” Straight Cut Tubing

- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Threaded Transfer Lines
- Specify Length, O.D./I.D., and Thread Size when ordering



Description	Qty	Part No.	Price \$
304 Stainless Steel “Threaded” Straight Cut Tubing	Custom	C23040	OEM

304 Stainless Steel “Threaded” Bent/Formatted Tubing

- Available In Bent Shapes and Coils
- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Threaded Transfer Lines
- Specify Bend (w/ print), Length, Thread Size, & O.D./I.D. when ordering



Description	Qty	Part No.	Price \$
304 Stainless Steel “Threaded” Bent/Formatted Tubing	Custom	C23041	OEM

304 Stainless Steel “Flared” Straight Cut Tubing

- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Threaded Transfer Lines
- Specify Length, O.D./I.D., & Flare Angle when ordering



Description	Qty	Part No.	Price \$
304 Stainless Steel “Flared” Straight Cut Tubing	Custom	C23042	OEM

304 SS Tubing

304 Stainless Steel "Slotted" Straight Cut Tubing

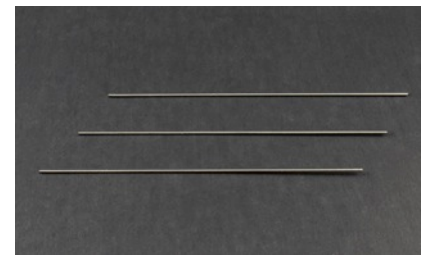
- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Threaded Transfer Lines
- Specify Length, O.D./I.D., & Slot Depth/Width when ordering



Description	Qty	Part No.	Price \$
304 Stainless Steel "Slotted" Straight Cut Tubing	Custom	C23036	OEM

Hypodermic Needle 304 Stainless Steel Straight Cut Tubing

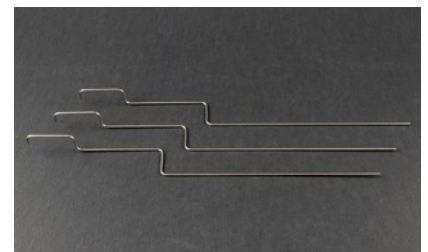
- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Micro Transfer Lines
- Gold plating available
- Specify Length, O.D./I.D., & Tubing Type when ordering



Description	Qty	Part No.	Price \$
Hypodermic Needle 304 Stainless Steel Straight Cut Tubing	Custom	C23043	OEM

Hypodermic Needle 304 Stainless Steel Bent/Formed Tubing

- Available In Bent Shapes and Coils
- Various Outside and Inside Diameters
- Use for Micro Transfer Lines
- Gold plating available
- Specify Bend (w/ print), Length, & O.D./I.D. when ordering



Description	Qty	Part No.	Price \$
Hypodermic Needle 304 Stainless Steel Bent/Formed Tubing	Custom	C23044	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

316 SS Tubing

316 Stainless Steel Straight Cut Tubing

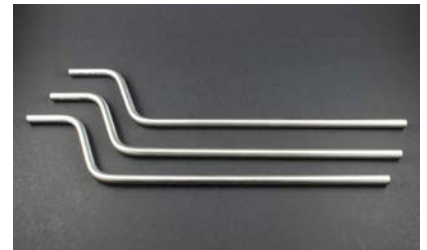
- Available In Straight Cut Lengths
- Various Outside and Inside Diameters
- Excellent Choice For Gas Transfer Lines
- Specify Length & I.D. when ordering



Description	Qty	Part No.	Price \$
316 Stainless Steel Straight Cut Tubing 1/8" O.D.	Custom	C23026	OEM
316 Stainless Steel Straight Cut Tubing 1/4" O.D.	Custom	C23027	OEM

316 Stainless Steel Bent/Formatted Tubing

- Available In Bent Shapes and Coils
- Various Outside and Inside Diameters
- Use for Coiled or Bent Gas Transfer Lines
- Specify Bend (w/ print), Length, & O.D./I.D. when ordering



Description	Qty	Part No.	Price \$
316 Stainless Steel Bent/Formatted Tubing 1/8" O.D.	Custom	C23028	OEM
316 Stainless Steel Bent/Formatted Tubing 1/4" O.D.	Custom	C23029	OEM

316 Stainless Steel "Special Finish" Beveled Tubing

- Several Lengths Available
- Special Finished Bevel Surface
- Smooth Transition on Bevel Surface
- Various Outside and Inside Diameters
- Specify Length, Tubing Size, & O.D./I.D. with print when ordering



Description	Qty	Part No.	Price \$
316 Stainless Steel Beveled Special Finished Tube	Custom	C23021	OEM

316 Stainless Steel "Threaded" Straight Cut Tubing

- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Threaded Transfer Lines
- Specify Length, O.D./I.D., and Thread Size when ordering



Description	Qty	Part No.	Price \$
316 Stainless Steel "Threaded" Straight Cut Tubing	Custom	C23032	OEM

316 SS Tubing

316 Stainless Steel "Threaded" Bent/Formatted Tubing

- Available In Bent Shapes and Coils
- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Threaded Transfer Lines
- Specify Bend (w/ print), Length, Thread Size, & O.D./I.D. when ordering



Description	Qty	Part No.	Price \$
316 Stainless Steel "Threaded" Bent/Formatted Tubing	Custom	C23033	OEM

316 Stainless Steel "Flared" Straight Cut Tubing

- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Threaded Transfer Lines
- Specify Length, O.D./I.D., & Flare Angle when ordering



Description	Qty	Part No.	Price \$
316 Stainless Steel "Flared" Straight Cut Tubing	Custom	C23035	OEM

316 Stainless Steel "Slotted" Straight Cut Tubing

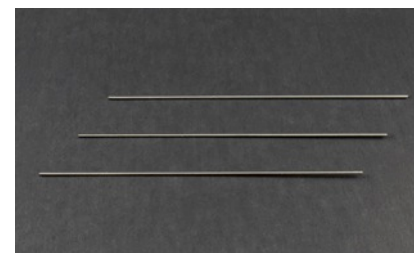
- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Threaded Transfer Lines
- Specify Length, O.D./I.D., & Slot Depth/Width when ordering



Description	Qty	Part No.	Price \$
316 Stainless Steel "Slotted" Straight Cut Tubing	Custom	C23037	OEM

Hypodermic Needle 316 Stainless Steel Straight Cut Tubing

- Available In Custom Lengths
- Various Outside and Inside Diameters
- Use for Micro Transfer Lines
- Specify Length, O.D./I.D., & Tubing Type when ordering

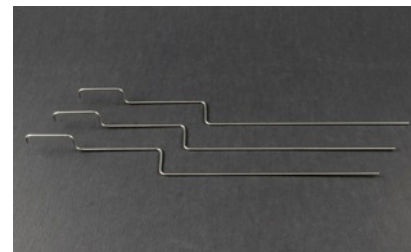


Description	Qty	Part No.	Price \$
Hypodermic Needle 316 Stainless Steel Straight Cut Tubing	Custom	C23045	OEM

316 SS Tubing

Hypodermic Needle 316 Stainless Steel Bent/Formed Tubing

- Available In Bent Shapes and Coils
- Various Outside and Inside Diameters
- Use for Micro Transfer Lines
- Gold plating available
- Specify Bend (w/ print), Length, & O.D./I.D. when ordering



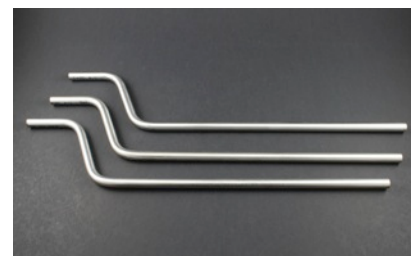
Description	Qty	Part No.	Price \$
Hypodermic Needle 316 Stainless Steel Bent/Formed Tubing	Custom	C23046	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Teflon Lined Tubing

Teflon Lined Aluminum Bent/Formatted Tubing

- Available In Bent Shapes and Coils
- Chemically Deposited Interior Coated with Teflon (PTFE)
- Free From Interior Pinholes
- Coating Thickness Approximately 0.001"
- Requires Preconditioning Before Use With Chromatography Applications
- Specify Bend (w/ print) & Length when ordering



Description	Qty	Part No.	Price \$
Teflon Lined Aluminum Bent/Formatted Tubing 1/8" O.D. x 0.075" I.D.	Custom	C23047	OEM
Teflon Lined Aluminum Bent/Formatted Tubing 1/4" O.D. x 0.188" I.D.	Custom	C23048	OEM

Teflon Lined Aluminum Straight Cut Tubing

- Available In Straight Cut Lengths
- Chemically Deposited Interior Coated with Teflon (PTFE)
- Free From Interior Pinholes
- Coating Thickness Approximately 0.001"
- Requires Preconditioning Before Use With Chromatography Applications
- Specify Length when ordering



Description	Qty	Part No.	Price \$
Teflon Lined Aluminum Tubing 1/8" O.D. x 0.075" I.D.	Custom	C23000	OEM
Teflon Lined Aluminum Tubing 1/4" O.D. x 0.188" I.D.	Custom	C23001	OEM

Teflon Lined 304 Stainless Steel Bent/Formatted Tubing

- Available In Bent Shapes and Coils
- Chemically Deposited Interior Coated with Teflon (PTFE)
- Free From Interior Pinholes
- Coating Thickness Approximately 0.001"
- Requires Preconditioning Before Use With Chromatography Applications
- Sturdy Stainless Steel Tube
- Specify Bend (w/ print) & Length when ordering



Description	Qty	Part No.	Price \$
Teflon Lined 304 Stainless Steel Bent/Formatted Tubing 1/8" O.D. x 0.083" I.D.	Custom	C23018	OEM
Teflon Lined 304 Stainless Steel Bent/Formatted Tubing 1/4" O.D. x 0.208" I.D.	Custom	C23019	OEM

Teflon Lined Tubing

Teflon Lined 304 Stainless Steel Tubing Straight Cut

- Available In Straight Cut Lengths
- Chemically Deposited Interior Coated with Teflon (PTFE)
- Free From Interior Pinholes
- Coating Thickness Approximately 0.001"
- Requires Preconditioning Before Use With Chromatography Applications
- Sturdy Stainless Steel Tube
- Specify Length when ordering



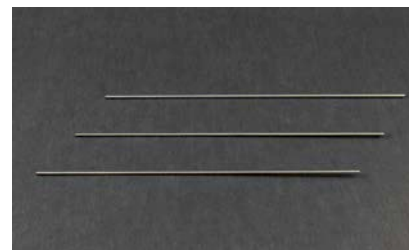
Description	Qty	Part No.	Price \$
Teflon Lined 304 Stainless Steel Straight Cut Tubing 1/8" O.D. x 0.083" I.D.	Custom	C23016	OEM
Teflon Lined 304 Stainless Steel Straight Cut Tubing 1/4" O.D. x 0.208" I.D.	Custom	C23017	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Inconel Tubing

Inconel 625 Straight Cut Tubing

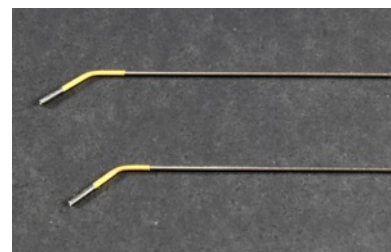
- Various Outside and Inside Diameters
- Use for Micro Transfer Lines
- Specify Length, Size, & Tubing Type when ordering
- Gold plating available



Description	Qty	Part No.	Price \$
Inconel 625 Straight Cut Tubing	Custom	C23038	OEM

Inconel 625 Bent/Formatted Tubing

- Available In Bent Shapes and Coils
- Various Outside and Inside Diameters
- Use for Micro Transfer Lines
- Specify Length, Size, & Tubing Type when ordering
- Gold plating available



Description	Qty	Part No.	Price \$
Inconel 625 Bent/Formatted Tubing	Custom	C23039	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

FEP Tubing

FEP Tubing, Precut Rolls

- Fluorinated Ethylene Polypropylene (FEP)
- Precut into 25 ft. rolls
- Resistance to chemical attack
- Optical Transparency
- Lower heat shrink temperature & more flexibility than PTFE
- More lubricious than PFA



Description	Qty	Part No.	Price \$
FEP Industrial Tubing – 1/8" O.D. x 1/16" I.D. (25 ft. roll)	1/pkg	CH-106194	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

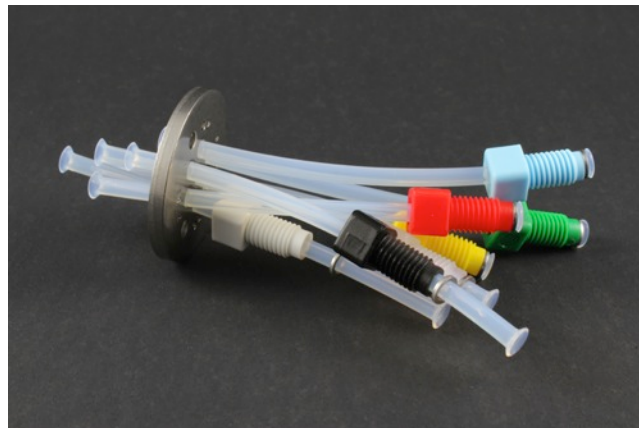
Flanged Teflon Tubing Assemblies

Flanged Teflon Tubing

These custom flanged PTFE tubing assemblies come preassembled to connect to many instruments and meters. Assemblies feature 1/16" ID tubing with flared ends to provide a fluid path of continuous PTFE - process fluid purity is maintained.

Flanged Teflon tubing assemblies typically carry sample and reagent fluids to their destination. In many cases, flanged tubing assemblies must be chemically inert, and properly designed to avoid "dead volume" in the flow path. Dead volume leads to sample carry over, due to residual material in the flow path that carries over to the next test sample. Any carry over reduces the accuracy of the proceeding test samples.

Precision tubing assemblies are usually washed and rinsed after every test sample, and therefore should be replaced periodically to maintain chemical inertness and test accuracy. These assemblies may be sterilized with ethylene oxide.



We offer the following Teflon flanged tubing fabrication services:

- Chemically Inert Tubing Assemblies for the sample side of an instrument
- Preassembled to connect to many instruments and meters
- Finger-tightness for leak-free seal at 500 psi liquid
- Zero dead volume
- Tubing Assemblies for the wash & waste side of an instrument
- Flat-bottom 1/4-28 fittings are perfect for many instruments
- Available in PTFE & FEP Tubing
- Tubing O.D.'s available .0625" and .125"
- Specify Length, Tubing Type & Size and Fitting Color When Ordering
- Customer may supply us with tubing and fittings to be assembled

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

UV-VIS HPLC Detectors

- ♦ **VUV-40F** Fixed Wavelength
- ♦ **EUV** Fixed Wavelength – Low Cost Unit
- ♦ **VUV-14 UV-VIS** Fixed Wavelength
- ♦ **VUV-14D UV-VIS** Fixed Wavelength
- ♦ **VUV-24 UV-VIS** Variable Wavelength
- ♦ **OEM & Private Label Models**

VUV-40F Detector

VUV-40F Dual Beam Fixed Wavelength Absorbance Detector

The VUV-40F is a dual beam, fixed wavelength, optical absorbance detector for liquid chromatography. The OEM module can be configured in a variety of ways from standalone operation to incorporation into a dedicated analyzer.

Variety of Light Sources

The VUV-40F can be configured with Hg, LED, Deuterium or Xenon light sources allowing a wide selection of light throughput, wavelength selection, power and sizes to fit any application.

Dual Beam

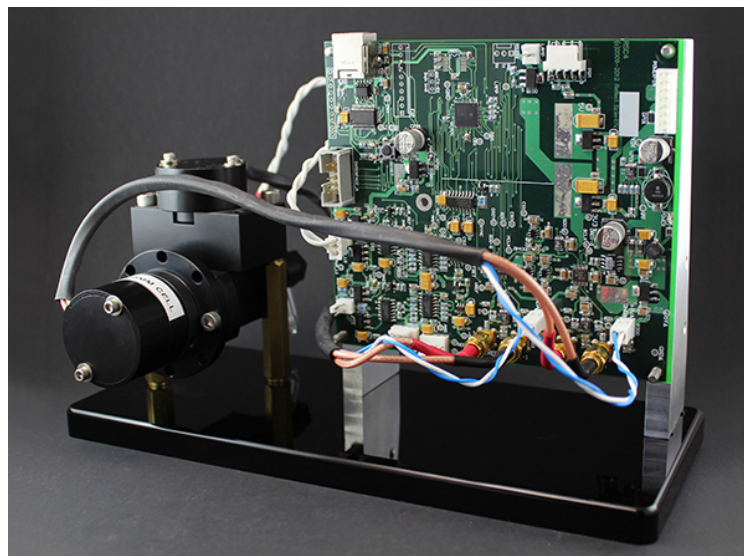
Compact patented design keeps the optical unit small but with the performance of larger instruments. This allows smaller dedicated OEM designs or smaller footprint for stand-alone instruments.

Advanced Electronics

High-resolution output can be accessed by USB or IEEE488 protocols. Fully programmable parameters using a host computer are permanently stored in non-volatile memory. Easily integrated with OEM analytical systems. Stand-alone operation configuration for private label instruments is also available.

Original Equipment Manufacturer

Atlas offers complete units for private label to individual modules designed to fit your specific application. For further information please contact us.



Light sources	Low pressure mercury lamp 254 nm Deuterium 190 nm – 400 nm LED (discrete wavelengths) Xenon flash 200 nm – 800 nm
Optical design	Double beam (sample/reference)
Wavelength selection	Customer replaceable interference filter (filter not required on LED light source however it is application dependent)
Wavelength accuracy	Defined by elemental line emission characteristics of the lamp
Wavelength precision	Better than +/- 0.2 nm
Band pass	Low pressure mercury lamp <0.1 nm Deuterium/Xenon lamp typically 10.0 nm at half height (dependent on interference filter) LED 5 nm – 40 nm dependent on wavelength
Noise	< +/- 1 x 10 ⁻⁵ AU over 30 sec period peak to peak with 1.0 sec rise time
Drift	< +/- 1 x 10 ⁻⁴ AU over 30 min period peak to peak 1.0 sec rise time
Input/Output	Standard configuration USB I/O Optional 24 bit analog output or IEEE 488 Data rate can be fixed or variable from 80 samples/sec to 30,000 samples/sec.
Cells	5mm, 10mm path length STD cell; 5mm, 10mm path length High flow cell; micro cell, prep cell

EUV Fixed Wavelength Detector

The EUV model is a low cost fixed wavelength light absorbance monitor designed for chromatography. Although it does not have the sensitivity of our VUV-14 analytical unit, it is ideally suited for applications where there is a relatively high absorbance signal or where the amount of sample is not limited. The EUV can be used with a computer or configured as a standalone unit.

Fixed Wavelength

The EUV uses a replaceable low pressure Hg lamp for a wavelength emission of 254nm.

Sampling

Sampling is accomplished using a gasketless flow through chemically inert cell with a path length of 5mm.

Low cost, low maintenance

The EUV utilizes a unique optical design that eliminates expensive optical components but still provides a good detection sensitivity. Total part count has been reduced resulting in a very easy to service, rugged design.

Original Equipment Manufacturer

Atlas offers complete units for private label to individual modules designed to fit your specific application. For further information please contact us.

Specifications:

Light sources	Mercury Lamp 254 nm
Optical design	Interference filter with lamp noise correction
Wavelength selection	Hg lamp: 254 nm with +/- 20 nm band pass filter
Input/Output	USB
Sample Cell	Flow cell with 5mm path length, total dead volume 9 uL (illuminated volume)



VUV-14 Detector

VUV-14 Fixed Wavelength UV-VIS Absorbance Monitor

High Sensitivity

The VUV-14 is a fixed wavelength light absorbance monitor designed to be used with ultra low volume sampling cells under flowing solvent conditions (i.e. chromatography). The VUV-14 series of detectors has a high resolution analog output with a sensitivity range from 4.0 AU/V to 0.0005 AU/V and features a state-of-the-art noise level of less than ± 0.00001 AU.

Fixed wavelength

The VUV-14 uses a low pressure Hg lamp for a wavelength emission of 254nm.

Variety of sample cell configurations

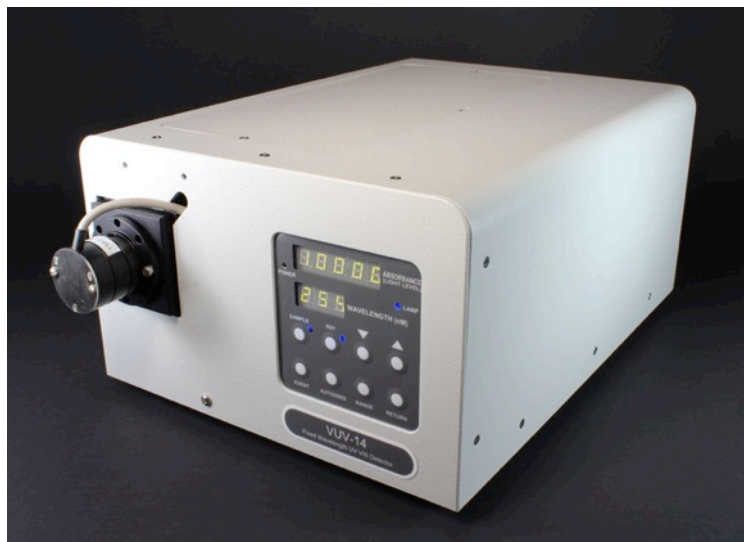
The VUV-14 has a broad line of sample cells available. These include cells designed for on column capillary monitoring, standard and high flow 5 mm and 10 mm path length HPLC cells, and preparative LC. Whatever your application the VUV-14 can serve as a reliable source for obtaining the results you want.

Reliable, Rugged, Low Maintenance Design

The VUV-14 is constructed with a high reliability lamp, true double beam sample/reference light paths and a robust universal power supply. A rugged tactile feedback keypad for instrument control is standard.

Original Equipment Manufacturer

Atlas offers complete units for private label to individual modules designed to fit your specific application. For further information please contact us.



VUV-14 Detector

Specifications:

Light Source(s):	Mercury lamp for 254 nm wavelength
Optical design:	Interference filter with fiber optic beam splitter and high sensitivity/low RI effect flow cell
Wavelength selection:	Hg lamp: 254 nm with +/- 5nm band pass filter
Wavelength accuracy:	Defined by the elemental line emission characteristic of the lamp.
Wavelength precision:	Better than +/- 0.2 nm
Wavelength band-pass:	Typical Hg elemental line emission bandwidth is less than 0.1 nm
Noise and Drift:	< +/- 1 X 10 ⁻⁵ AU (over 30 sec period peak to peak, 1.0 sec rise time); < +/- 1 X 10 ⁻⁴ AU (over 30 min. period peak to peak, 1.0 sec rise time) with STD sample cell at constant temperature
Input/Output connections:	RS-232 computer I/O; auto-injection input (event or run); auto-zero input; one analog integrator or chart recorder output, (voltage range default 1.0 v/AU); selectable analog range outputs of 4.0, 2.0, 1.0, 0.5, 0.2, 0.1, 0.05, 0.01, 0.005, 0.002, 0.001, 0.0005 AU/V with voltage range of +/- 4 V at any scale
Displays:	Absorbance (5 digit LED); wavelength (3 digit LED); analog output range (momentarily from absorbance display by pressing range switch); reference light level; sample light level
Size:	6.6" (height) X 9.4" (width) X 15" ; Approx. 5.5 kg (12 lb. shipping weight)
Sample Cells:	Standard HPLC flow cell with 10 mm path length, total dead volume of 18.0 µL (illuminated volume). Other optional cells: on column capillary cell, micro cell (1.0 µL), 5 mm path length HPLC cell (10 µL volume), high volume preparative cell, high pressure/high volume preparative. Please note all cells can be changed by the user.



VUV-14 Detector

VUV-14 Detector

- High Sensitivity
- Fixed Wavelength (254nm)
- Variety of sample cell configurations
- Reliable, Rugged, Low Maintenance Design
- OEM Models available
- Custom Configurations available



Description	Qty	Part#	Price \$
Fixed wavelength ultraviolet/visible absorbance monitor, with HG Lamp, 254 nm filter with 10 mm STD cell, 18 microliter	1	9014-0001	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with HG Lamp, 254 nm filter with 5 mm STD cell, 10 microliter	1	9014-0010	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with HG Lamp 254nm filter with CAP cell for 360 OD capillary, "on-column" monitoring	1	9014-0007	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with HG Lamp, 254nm filter with PREP-FIX cell, low back pressure 0-3mm, set to 1.0 mm by default at factory	1	9014-0011	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with HG Lamp, 254 nm filter with MICRO-1000 psi cell, 1.0 microliter, 2 mm path length	1	9014-0013	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with HG Lamp, 254nm filter with STD-PREP cell, available with 5 mm path length, low back pressure	1	9014-0015	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with HG Lamp, 254nm filter with STD-PREP cell, available with 10 mm path length, low back pressure	1	9014-0009	OEM

Mercury Lamp

- Replacement Mercury Lamp (254nm)
- For VUV-14 detector



Description	Qty	Part#	Price \$
Mercury Lamp	1 ea.	9100-0002	OEM

Interference Filter

- Replacement Interference Filter (254nm)
- For VUV-14 and VUV-14D detector



Description	Qty	Part#	Price \$
Interference Filter – 254 nm	1 ea.	9150-0254	OEM

VUV-14D Detector

VUV-14D Fixed Wavelength UV-VIS Absorbance Monitor

High Sensitivity

The VUV-14D is a fixed wavelength light absorbance monitor designed to be used with ultra low volume sampling cells under flowing solvent conditions (i.e. chromatography). The VUV-14D series of detectors has a high resolution analog output with a sensitivity range from 4.0 AU/V to 0.0005 AU/V and features a state-of-the-art noise level of less than ± 0.00001 AU.

Flexible Configurations

The VUV-14D uses a deuterium lamp with a working wavelength range from 190 nm to 400 nm. Specific wavelengths are selected by using an interference filter. One 254nm filter is included with each detector. Other wavelengths are available upon request (prices will vary).

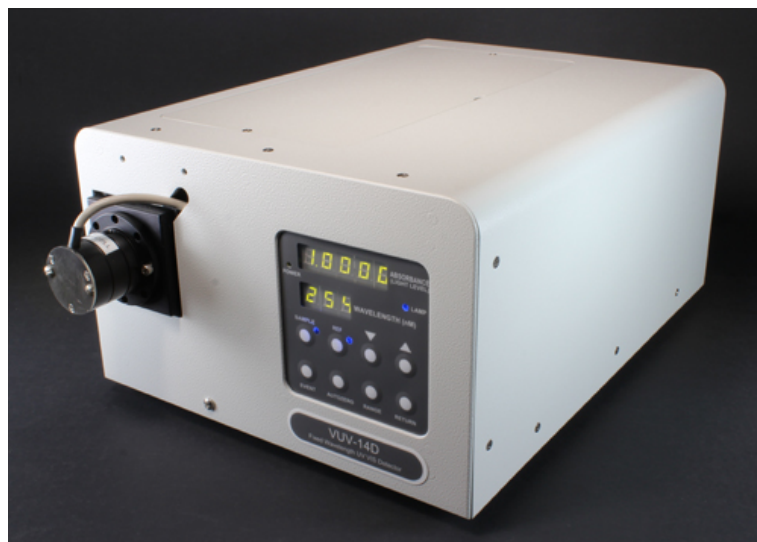
The VUV-14D has a broad line of sample cells available. These include cells designed for on column capillary monitoring, standard and high flow 5 mm and 10 mm path length HPLC cells, and preparative LC. Whatever your application the VUV-14D can serve as a reliable source for obtaining the results you want.

Reliable, Rugged, Low Maintenance Design

The VUV-14D is constructed with a high reliability lamp, true double beam sample/reference light paths and a robust universal power supply. A rugged tactile feedback keypad for instrument control is standard.

Original Equipment Manufacturer

Atlas offers complete units for private label to individual modules designed to fit your specific application. For further information please contact us.



VUV-14D Detector

Specifications:

Light Source(s):	D2 lamp for 190-400 nm wavelengths
Optical design:	Interference filter with fiber optic beam splitter and high sensitivity/low RI effect flowcell.
Wavelength selection:	User changeable bandpass filters
Wavelength accuracy:	Dependent on bandpass filter specifications
Wavelength precision:	Dependent on bandpass filter specifications
Wavelength band-pass:	Dependent on bandpass filter specifications
Noise and Drift:	< +/- 1 X 10 ⁻⁵ AU (over 30 sec period peak to peak, 1.0 sec rise time); < +/- 1 X 10 ⁻⁴ AU (over 30 min. period peak to peak, 1.0 sec rise time) with STD sample cell at constant temperature
Input/Output connections:	RS-232 computer I/O; auto-injection input (event or run); auto-zero input; one analog integrator or chart recorder output, (voltage range default 1.0 v/AU); selectable analog range outputs of 4.0, 2.0, 1.0, 0.5, 0.2, 0.1, 0.05, 0.01, 0.005, 0.002, 0.001, 0.0005 AU/V with voltage range of +/- 4 V at any scale
Displays:	Absorbance (5 digit LED); wavelength (3 digit LED); analog output range (momentarily from absorbance display by pressing range switch); reference light level; sample light level
Size:	6.6" (height) X 9.4" (width) X 15" ; Approx. 5.5 kg (12 lb. shipping weight)
Sample Cells:	Standard HPLC flow cell with 10 mm pathlength, total dead volume of 18.0 µL (illuminated volume); other optional cells: on column capillary cell, micro cell (1.0 µL), 5 mm path length HPLC cell (10 µL volume), high volume preparative cell, high pressure/high volume preparative. Please note all cells can be changed by the user.



VUV-14D Detector

VUV-14D Fixed Wavelength UV-VIS Absorbance Monitor

- High Sensitivity
- Flexible Configurations
- Reliable, Rugged, Low Maintenance Design
- OEM Models available
- Custom Configurations available



Description	Qty	Part#	Price \$
Fixed wavelength ultraviolet/visible absorbance monitor, with D2 Lamp, 10 mm STD cell, 18 microliter	1	9014-2001	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with D2 Lamp, 5 mm STD cell, 10 microliter	1	9014-2010	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with D2 Lamp, CAP cell for 360 OD capillary, "on-column" monitoring	1	9014-2007	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with D2 Lamp, PREP-FIX cell, low back pressure 0-3mm, set to 1.0 mm by default at factory	1	9014-2011	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with D2 Lamp, MICRO-1000 cell, 1.0 microliter, 2 mm pathlength	1	9014-2013	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with D2 Lamp, with STD-PREP cell, available with 5 mm pathlength, low backpressure	1	9014-0015	OEM
Fixed wavelength ultraviolet/visible absorbance monitor, with D2 Lamp, with STD-PREP cell, available with 10 mm pathlength, low backpressure	1	9014-2009	OEM

D2 Deuterium Lamp

- Long life
- Low noise Deuterium Replacement Lamp
- For VUV-24 and VUV-14D detectors



Description	Qty	Part#	Price \$
D2 Deuterium Lamp	1 ea.	9100-0001	OEM

Interference Filter

- Replacement Interference Filter (254nm)
- For VUV-14 and VUV-14D detector
- Other wavelengths available upon request



Description	Qty	Part#	Price \$
Interference Filter – 254 nm	1 ea.	9150-0254	OEM

* Price varies with monitoring wavelength selected. Not all wavelengths available. Call for availability of bandpass filters.

VUV-24 Detector

VUV-24 Variable Wavelength UV-VIS Absorbance Monitor

High Sensitivity

The VUV-24 is a variable wavelength light absorbance monitor designed to be used with ultra low volume sampling cells under flowing solvent conditions (i.e. chromatography). The VUV-24 series of detectors has a high resolution analog output with a sensitivity range from 4.0 AU/V to 0.0005 AU/V and feature a state-of-the-art noise level of less than ± 0.00001 AU.

Flexible Configurations

The VUV-24 can be configured to use a deuterium lamp with a working wavelength range from 190 nm to 400 nm. Specific wavelengths are selected by using the front panel or RS232 instrument control.

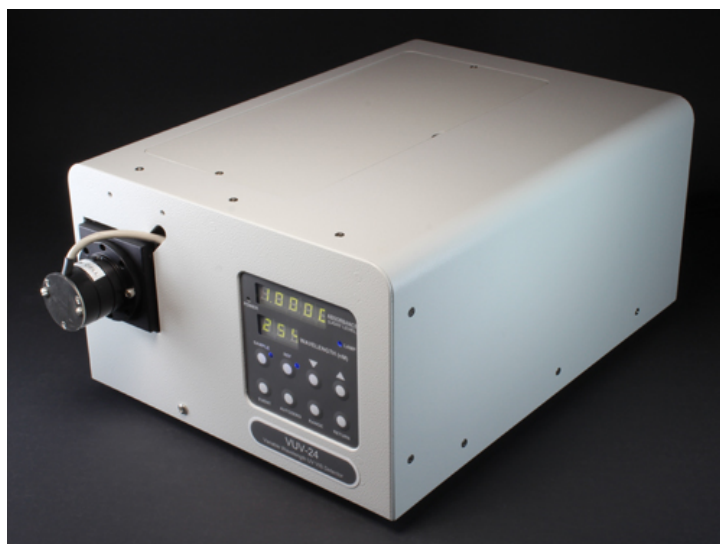
The VUV-24 has a broad line of sample cells available. These include cells designed for on column capillary monitoring, standard and high flow 5 mm and 10 mm path length HPLC cells, and preparative LC. Whatever your application, the VUV-24 can serve as a reliable source for obtaining the results you want.

Reliable, Rugged, Low Maintenance Design

The VUV-24 is constructed with a high reliability lamp, true double beam sample/reference light paths and a robust universal power supply. A rugged tactile feedback keypad for instrument control is standard.

Original Equipment Manufacturer

Atlas offers complete units for private label to individual modules designed to fit your specific application. For further information please contact us.



VUV-24 Detector

Specifications:

Light Source(s):	Deuterium lamp, typical lifetime of >2000 hours, easily changed, prealigned
Optical design:	Prism monochromator (patented) with dual beam silicon photodiodes: wavelength selection from 190 to 400 nm, one wavelength selection is output to the serial interface and the high resolution analog output
Wavelength selection:	190 nm to 400 nm in increments of 1 nm; user selected from front panel via push button input or selected from computer via RS-232 input/output
Wavelength accuracy:	Better than +/- 2 nm range
Wavelength precision:	Better than +/- 0.2 nm
Wavelength band-pass:	<8.0 nm (typical) at half-height at 250 nm
Noise and Drift:	< +/- 1 X 10 ⁻⁵ AU (over 30 sec period peak to peak, 1.0 sec rise time); < +/- 1 X 10 ⁻⁴ AU (over 30 min. period peak to peak, 1.0 sec rise time) with STD sample cell at constant temperature
Input/Output connections:	RS-232 computer I/O; auto-injection input (event or run); auto-zero input; one analog integrator or chart recorder output, (voltage range default 1.0 V/AU); selectable analog range outputs of 4.0, 2.0, 1.0, 0.5, 0.2, 0.1, 0.05, 0.01, 0.005, 0.002, 0.001, 0.0005 AU/V with voltage range of +/- 4 V at any scale
Displays:	Absorbance (5 digit LED); wavelength (3 digit LED); analog output range (momentarily from absorbance display by pressing range switch); reference light level; sample light level
Size:	6.6" (height) X 9.4" (width) X 15" ; Approx. 7.3 kg (16 lb. shipping weight)
Sample cells:	Standard HPLC flow cell with 10 mm path length, total dead volume of 18.0 µL (illuminated volume). Other optional cells: on column capillary cell, micro cell (1.0 µL), 5 mm path length HPLC cell (10 µL volume), high volume preparative cell, high pressure/high volume preparative, cuvette holder. Please note all cells can be changed by the user. Other cells are available; not all are listed.



VUV-24 Detector

VUV-24 Variable Wavelength UV-VIS Absorbance Monitor

- High Sensitivity
- Flexible Configurations
- Reliable, Rugged, Low Maintenance Design



Description	Qty	Part#	Price \$
Variable wavelength ultraviolet/visible absorbance monitor detector with D2 lamp, single wavelength monitoring, 10 mm STD cell, 18 microliter	1	9024-0001	OEM
Variable wavelength ultraviolet/visible absorbance monitor detector with D2 lamp, single wavelength monitoring, CAP cell, for 365 OD micron capillary with ID from 25 to 300 microns	1	9024-0007	OEM
Variable wavelength ultraviolet/visible absorbance monitor detector with D2 lamp, single wavelength monitoring, 10mm STD-PREP cell, low back pressure, high sensitivity	1	9024-0009	OEM
Variable wavelength ultraviolet/visible absorbance monitor detector with D2 lamp, single wavelength monitoring, 5 mm STD cell, 10 microliter, low RI effect	1	9024-0010	OEM
Variable wavelength ultraviolet/visible absorbance monitor detector with D2 lamp, single wavelength monitoring, PREP-FIX cell, 0 to 3 mm path length, set to 1.0 mm if not specified, very low back pressure	1	9024-0011	OEM
Variable wavelength ultraviolet/visible absorbance monitor detector with D2 lamp, single wavelength monitoring, MICRO-1000 psi cell, 2 mm path length, 1 microliter volume	1	9024-0013	OEM

D2 Deuterium Lamp

- Long life
- Low noise Deuterium Replacement Lamp
- For VUV-24 and VUV-14D detectors



Description	Qty	Part#	Price \$
D2 Deuterium Lamp	1 ea.	9100-0001	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

HPLC Column Test Mixtures

HPLC Column Test Mixtures

Test mixes enable you to troubleshoot chromatographic problems, optimize system efficiency, and evaluate columns under conditions where their performance is understood. We ship these test mixtures in amber ampules to prevent photo degradation.

LC Test Mix

Concentration:

in Methanol: Water (70:30)
Toluene - 100 ppm
Tartazine - 6 ppm
Anthracene - 5 ppm
Acetophenone - 2 ppm



Description	Qty	Part#	Price \$
LC Test Mix Ampule, 1ml	1/pk	A3469-020	OEM
	5/pk	A3469-010	

FL Test Mix

Concentration:

in Acetonitrile: Methanol (2:98)
Anthracene - <.001



Description	Qty	Part#	Price \$
FL Test Mix Ampule, 1ml	1/pk	A3469-030-1	OEM
	5/pk	A3469-030	

LOW RI Test Mix

Concentration:

in Glycerol: Water (69.2:30.8)



Description	Qty	Part#	Price \$
LOW RI Test Mix Ampule, 1ml	1/pk	A3469-060	OEM
	5/pk	A3469-050	

HPLC Mixtures

HI RI Test Mix

Concentration:
in Isopropanol: Water (83.2:16.8)



Description	Qty	Part#	Price \$
HI RI Test Mix Ampule, 1ml	1/pk	A3469-070-1	OEM
	5/pk	A3469-070	

Autosampler Test Mix

Concentration:
in Toluene: Methanol (0.5:99.5)



Description	Qty	Part#	Price \$
Autosampler Test Mix Ampule, 1ml	1/pk	A4991-010-1	OEM
	5/pk	A4991-010	

Autosampler Dilution Test Mix

Concentration:
in Toluene: Methanol (50:50)



Description	Qty	Part#	Price \$
Autosampler Dilution Test Mix Ampule, 1ml	1/pk	A5135-010-1	OEM
	5/pk	A5135-010	

Pump Test Mix

Concentration:
100% Methyl Paraben (Powder)



Description	Qty	Part#	Price \$
Pump Test Mix, 1ml	1/pk	A4904-010-1	OEM
	5/pk	A4904-010	

UV Linearity Detector Test Kit

Concentration:

Ethyl Paraben in Methanol 99.99%

Ethyl Paraben - 28 ppm

Ethyl Paraben - 14 ppm

Ethyl Paraben - 7 ppm

* Includes Certificate of Analysis



Description	Qty	Part#	Price \$
UV Linearity Detector Test Kit Ampule, 10ml (Includes one of each concentration)	3/pk	A5113-010	OEM

UV Linearity Detector Test Kit

Concentration:

Ethyl Paraben in Methanol 99.99%

Ethyl Paraben - 22.4 ppm

Ethyl Paraben - 11.2 ppm

Ethyl Paraben - 5.6 ppm

* Includes Certificate of Analysis



Description	Qty	Part#	Price \$
UV Linearity Detector Test Kit Ampule, 10ml (Includes one of each concentration)	3/pk	A5113-020	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

HPLC Mobile Phase Inlet Filters

- ♦ Fits all HPLC systems

Teflon Inlet Filter

- Flat Bottom Design Draws All the Solvent From the Reservoir
- Teflon Housing w/Teflon Filter
- Keep Particulates Out of Your Pump
- Draws 98% of Mobile Phase without Drawing Air into the System
- Prolong Equipment Life
- No tools or fittings needed
- High Surface Area For Long Life
- Slip On Design or Screw On Design
- 10µm Porosity



Description	Qty	Part#	Price \$
Solvent Inlet Filter Teflon , w/PEEK threaded for 1/8" O.D. Teflon Tubing	1/pk 5/pk	A4258-010 A4258-010-5	OEM
Solvent Inlet Filter Teflon , w/PEEK barbed stem for 1/16" I.D. Teflon Tubing	1/pk 5/pk	A4258-020 A4258-020-5	OEM
Replacement Teflon Filter Discs to Fit A4258 Filter Housing	5/Pk	A4258-010RD	OEM

316 Stainless Steel Inlet Filter

- Keep Particulates Out of Your Pump
- Prolong Equipment Life
- Cylindrical Design Maximizes Filter Life
- Slip On Design or Screw On Design
- No tools or fittings needed
- 10µm Porosity
- Passivated Stainless Steel



Description	Qty	Part#	Price \$
Solvent Inlet Filter SS, 3/8" O. D. w/PEEK barbed stem for 1/16" I.D. Teflon Tubing	1/pk 5/pk	A4929-010 A4929-010-5	OEM
Solvent Inlet Filter SS, 3/8" O. D. w/PEEK threaded for 1/8" O.D. Teflon Tubing	1/pk 5/pk	A4929-020 A4929-020-5	OEM
Small 1/4" O. D. Solvent Inlet Filter SS, w/threaded SS to fit 1/8" O.D. Teflon Tubing- Can be used as filter or Sparger	1/pk 5/pk	A0369-010 A0369-010-5	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

HPLC Drain Bottles & Caps

HPLC Drain Bottles

HPLC drain bottles are used as a collection chamber for effluent waste from scientific instruments which use various solvents. These bottles are made of glass or high density polyethylene allowing for collection of most solvents. After collecting the solvents, the bottles may be easily transported to larger waste disposal containers within your lab or facility.

1000ml Graduated Lab Bottle

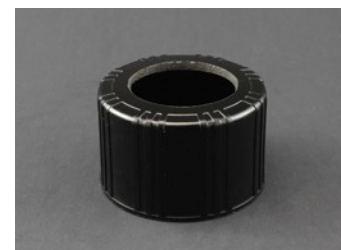
- Large white writing area
- Borosilicate glass
- 38-430 thread
- Optional – Black phenolic screw cap



Description	Qty	Part#	Price \$
1000ml Graduated Lab Bottle (includes Cap w/ Hole)	12/pk	1413-0430WCH	OEM
1000ml Graduated Lab Bottle (No Cap)	12/pk	1413-0430-12	OEM

Black Phenolic Screw Cap for 1000ml Bottle

- 1" Through hole for tubing
- Fits 1000ml graduated lab bottle
- Fits all bottles with 38-430 thread



Description	Qty	Part#	Price \$
Black Phenolic Screw Cap, 38-430 Thread with 1" Through Hole For Tubing	12/pk	DY50305500-12	OEM

250ml HDPE Wide Mouth Drain Bottle w/ Stainless Steel Bulkhead

- High Density Polyethylene (HDPE)
- One 316 Stainless Steel 1/16" Bulkhead Union Installed Into Cap (Union Accepts .0625" O. D. Tubing)
- 43mm Polypropylene Cap



Description	Qty	Part#	Price \$
250ml High Density Polyethylene Wide Mouth Drain Bottle w/ Cap & SS Fitting	6/pk	FM102771-6	OEM
Replacement 43mm Cap w/ One 316 SS 1/16" Bulkhead Union	6/pk	FM102771CAP	OEM

HPLC Drain Bottles

2000ml High Density Polyethylene Wide Mouth Drain Bottle

- High Density Polyethylene (HDPE)
- Two Bulkhead Barbed Nylon Fittings 1/2" I.D. Installed into Polypropylene 100mm Cap



Description	Qty	Part#	Price \$
2000ml High Density Polyethylene Wide Mouth Drain Bottle w/ Cap & Fittings	6/pk	393726501-6	OEM
Replacement 100mm Cap w/ Two Bulkhead Barbed Fittings (1/2" I.D.)	6/pk	393726501CAP	OEM

4000ml High Density Polyethylene Wide Mouth Drain Bottle

- High Density Polyethylene (HDPE)
- Two Bulkhead Barbed Nylon Fittings 1/2" I.D. Installed into Polypropylene 100mm Cap



Description	Qty	Part#	Price \$
4000ml High Density Polyethylene Wide Mouth Drain Bottle w/ Cap & Fittings	6/pk	FM103894-6	OEM
Replacement 100mm Cap w/ Two Bulkhead Barbed Fittings (1/2" I.D.)	6/pk	FM103894CAP	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

Pump Repair Kits

**LDC/Milton Roy
Thermo Fisher Scientific**

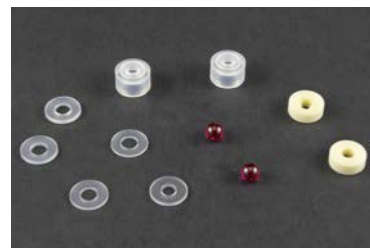
- ♦ CMI, CMII, CMIII, miniPump
- ♦ CM3000, CM3200, CM3500
- ♦ CM4000, CM4100

Pump Repair Kits

A preventive maintenance program that includes routine replacement of LDC/Milton Roy pump parts that are subject to wear will help you avoid costly downtime. The listed replacement parts are actual LDC/Thermo Scientific specified parts.

900517 Rebuild Kit (Rebuilds One Valve)

- 1ea .030" Kel-F Washer
- 2ea .020" Kel-F Washer
- 1ea .025" Kel-F Washer
- 1ea .035" Kel-F Washer
- 2ea Sapphire Seal Kit
- Instructions



Description	Qty	Part#	Price \$
900517 Rebuild Kit (Rebuilds One Valve)	1/pk	900517	OEM

801598 Replacement Seal Kit

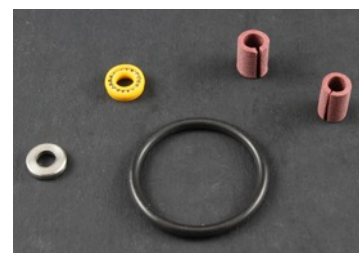
- 1ea Viton O-Ring
- 1ea Plunger Seal
- 1ea 316 Stainless Steel Back Up Ring .060"
- 2ea Plunger Bushings
- Instructions



Description	Qty	Part#	Price \$
801598 Replacement Seal Kit	1/pk	801598	OEM

801892001 Seal Replacement Kit, Gold

- 1ea Viton O-Ring
- 1ea Plunger Seal
- 1ea 316 Stainless Steel Back Up Ring .060"
- 2ea Plunger Bushings
- Instructions



Description	Qty	Part#	Price \$
801892001 Seal Replacement Kit, Gold	1/pk	801892001	OEM

Pump Repair Kits

802930001 Seal Replacement Kit, Gold

- 1ea Viton O-Ring
- 1ea 316 Stainless Steel Back Up Ring .060"
- 2ea Plunger Bushing
- 2ea Plunger Seal
- Instructions



Description	Qty	Part#	Price \$
802930001 Seal Replacement Kit, Gold	1/pk	802930001	OEM

802120 Liquid End Plunger Seal Removal / Insertion Tools

- 1ea Plunger Insert Tool
- 1ea Insert Tool Funnel
- 1ea Bio-Seal Removal Tool
- Instructions



Description	Qty	Part#	Price \$
802120 Liquid End Plunger Seal Removal / Insertion Tools	1/pk	802120	OEM

1960066976 1/8" Nut & Ferrule, for Suction Tube

- 1ea 316 Stainless Steel Nut 1/8"
- 1ea 316 Stainless Steel Ferrule 1/8"
- Instructions



Description	Qty	Part#	Price \$
1960066976 1/8" Nut & Ferrule, for Suction Tube	1/pk	1960066976	OEM

1960066975 1/16" Nut & Ferrule, for Discharge Tube

- 1ea 316 Stainless Steel Nut 1/16"
- 1ea 316 Stainless Steel Ferrule 1/16"
- Instructions



Description	Qty	Part#	Price \$
1960066975 1/16" Nut & Ferrule, for Discharge Tube	1/pk	1960066975	OEM

HPLC Preparative Fraction Collector

Preparative Fraction Collector

SP-100 Preparative Fraction Collector

Preparative scale fraction collector for liquid chromatography. Full X-Y-Z axis control with holding reservoir.

Versatile. The Atlas SP-100 fraction collector can be used for preparative to pilot production scale liquid chromatographic separations. The fully programmable X-Y-Z axis system accommodates a wide range of collection containers (40 - 1L Boston round shown). Holding reservoir allows drip-free fraction delivery. Control is accomplished through the use of a laptop or integration into an existing separation system.

We can also build a complete system that includes an SSI pump and Atlas detector. Just add your prep column. Contact us to discuss your preparative needs.



Description	Qty	Part No.	Price \$
Preparative Fraction Collector w/ X-Y-Z Axis Controller & Holding Reservoir	1	SP-100	OEM

Custom products & bulk pricing available. Email or fax us with your specifications for more information.

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