

Restek Essentials 2009 (Misc.)

RESTEK Restek Essentials

Special offers, services and knowledge online. 1 subscription

RESTEK REFINED Innovative products and solutions

NEW Solutions For Your Petro Analyses

Improved test for clean GC columns.
Standards to support ASTM methods.
Industry experts at your service.

Extraction Cells for ASE® 200

At Risk for Melamine

Meet new FDA guidelines for melamine contamination in milk. Get your melamine components.

FREE Base Plate
with purchase of 2500-000

USP in Stock Now!
New Lower Prices!

USP Residual Solvents Standards
We have them on hand and ready to ship within 24 hours!

USP in Stock Now!
New Lower Prices!

USP Residual Solvents Standards
We have them on hand and ready to ship within 24 hours!

Free Melamine Kit
for Agilent, Waters, Thermo

HROMalytic +61(0)3 9762 2034 09
AUSTRALIAN Distributors **ECH**nology www.chromtech.net.au

RESTEK eSSENTIALS innovative chromatography solutions

NEW!

melamine?

Complete kit with easy-to-follow instructions for detecting melamine down to 1µg/g

See page 3 for details!



Measure Your Savings!

NEW
Lower Prices
all 100µl and 250µl
GC columns. In stock
for delivery.

Stock up and save today!
Visit www.restek.com/essentials

Melamine Kit	3
Leak Detector	4
EZ Twist Top	7
GC/MS Maintenance	7
Swagelok Fittings	8
Parts for ASE Filings	9
Vacuum Bag Sampler	10

Rxi® 558 MS GC Columns	2
FREE Base Plate	4
ASE Extraction Cells	9
FREE Tedlar Bag	10
\$50 OFF Biphenyl LC Columns	13

HROMalytic +61(0)3 9762 2034 09
AUSTRALIAN Distributors **ECH**nology www.chromtech.net.au

RESTEK eSSENTIALS innovative chromatography solutions 2009 v.3

Save a Life

(and your budget too!)

Extend instrument lifetime and reduce downtime for repairs.

See page 5 for details.



USP Residual Solvents Standards

We have them on hand and ready to ship within 24 hours.

See page 10 for details.

New Lower Prices!



Subscribe online!
www.restek.com/essentials

What's New!

PLOT Columns	4
Swagelok® Fittings	6
7890 EZ Twist Top™	8
Canister Cleaning System	12
Melamine & Related Analog Standards	10

Great Savings!

Rxi® GC Columns	2
FREE Base Plate	7
Explosives Reference Materials	11
FREE Tedlar Bags	12
HPLC Detector Lamps	14
\$500 OFF Generators	16

RESTEK

HROMalytic +61(0)3 9762 2034 09
AUSTRALIAN Distributors **ECH**nology www.chromtech.net.au

RESTEK eSSENTIALS innovative chromatography solutions 2009 v.3

Introducing NEW Q-sep® 3000 Centrifuge for QuEChERS

See page 2 for details



Subscribe online!
www.restek.com/essentials

What's New!

Q-sep™ 3000 Centrifuge	2
Parts for ASE® Systems	2
Q-sep™ QuEChERS Standards	4
Electronic Flowmeter	8
EZ No-Vent™	10
GC/MS Cleaning Kit	10

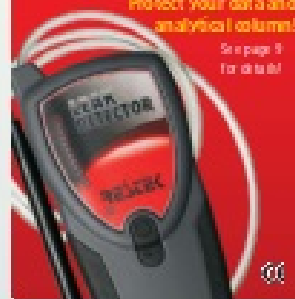
Great Savings!

PLOT Columns	6
FREE Base Plate	9
Ultra II LC Columns	12

Restek Electronic Leak Detector

Protect your data and analytical columns!

See page 9 for details



RESTEK

Chromatography Products +61(0)3 9762 2034 09
AUSTRALIAN Distributors **ECH**nology www.chromtech.net.au



Restek Essentials

Special offers on new and improved products I subscribe

RESTEK REFINED innovative petrochemical solutions

NEW Solutions For Your Petro Analyses

- Improved best-in-class GC columns.
- Standards to support ASTM methods.
- Industry experts at your service.



**Ex'traction Cells
for ASE® 200**

At Risk for Melamine

Meet new FDA guidance for melamine contamination in at-risk pharmaceutical components.



FREE Base Plate
with purchase of 2 triple filters

e'

&

Super-Clean Gas Filter
and Base Plate Kit

USP in Stock Now!

New Lower Prices!



USP Residual Solvents Standards
We have them on hand and ready to ship within 24 hours!



Preventive Maintenance Kits
for Agilent & Waters Systems

RESTEK[®] ESSENTIALS

Special offers on new and improved products | [subscribe](#)



REFINED

innovative petrochemical solutions

NEW Solutions For Your Petro Analyses

- Improved best-in-class GC columns.
- Standards to support ASTM methods.
- Industry experts at your service.





Extraction Cells for ASE[®] 200

At Risk for Melamine

Meet new FDA guidance for
melamine contamination
in at-risk pharmaceutical
components.



FREE Base Plate

with purchase of 2 triple filters



Save
\$200

**Super-Clean Gas Filter
and Base Plate Kit**

USP in
Stock
Now!

New
Lower
Prices!



**USP Residual
Solvents Standards**
We have them on hand and ready to
ship within 24 hours!



Preventive Maintenance Kits
for Agilent & Waters Systems



Measure Your Savings!
Stock up on Hamilton syringes and save today!



Get Your Mix
Time-Saving MegaMix® Environmental Reference Mixes.



Special pricing on multipacks of EPA 8270 Internal, Surrogate & Spike Mixes.



Restek Electronic Leak Detector
Protect your data and analytical column!

Introducing NEW Q-sep™ 3000 Centrifuge for QuEChERS



EZ No-Vent GC Column-MS Connector.
for Shimadzu GCs



Thermolite®, IceBlue® and BTO® Septa



ASE® 200 Extraction Cells
Meets original equipment manufacturer's performance.



Waste Overflow Indicator

Avoid messy pooling around mobile phase waste containers.



Hub-Cap 4 Liter Bottle Tops

Keep your mobile phase lines in the reservoirs without using messy tape, film, or foil.



Hub-Cap Filter Kit

Transfer and filter mobile phase in a single step!



Opti-Cap Bottle Top

Most economical way to helium-sparge and deliver HPLC mobile phases.

A black background with colorful, flowing light trails. The text 'Rxi-5Sil MS Columns' is prominently displayed. Below it, the text 'Exceptionally Inert Columns for GC/MS and Trace Level Analyses' is shown. A list of features follows: 'Low bleed for lower detection limits.', 'Excellent inertness for acidic and basic compounds.', and 'Engineered to assure column-to-column reproducibility.'

A white background with a blue 'U' logo. The text 'Ultra II LC Columns' is displayed. Below it, the text 'Universal application for Any LC System, providing scalability and unsurpassed selectivity on a wide range of particle sizes.' is shown. A 'NEW!' badge is in the top left corner.

A black background with several metallic, cylindrical sample cylinders and valves. The text 'Sulfinert® Sample Cylinders & Valves' is displayed.



Mobile Phase Degasser

The ultimate degasser provides highly stable baselines.



GC/MS Cleaning Kit

Our kit has all the components you need for cleaning and polishing your ion source.



MS Vacuum Pump Oil

Recommended for optimum mass spec performance.



Improved design!

MSD Source Nut



Ultra-High Purity (UHP) Gas Regulators

Most stable outlet pressure control with no secondary pressure regulation needed.



Alumaseal Ferrules



Ultra-Clean Resin

Equivalent to XAD-2 Resin

Q-sep™
QuEChERS Products
 Quick, Easy, Cheap, Effective, Rugged, and Safe!
Tubes & Standards
 for pesticide residue analysis from food products



2nd Source TO-14A/TO-15 Gas Calibration Standards.

Now with Naphthalene!



Custom Coatings for Ultimate Inertness!

Siltek® Deactivation for Liners

Fast GC Analysis
 Analyze Chlorinated
 Pesticides in
7 Minutes!

Rtx-CLPesticides Column Kits



Download the latest *Essentials* Flyer

Our monthly circular featuring special offers on new and improved products. Learn what's new and get deals on LC and GC columns and accessories, analytical standards, sample prep supplies, air sampling products and more!

Download (1.76mb)



melamine?

Complete kit with easy-to-follow instructions for detecting melamine down to 1µg/g

See page 3 for details!



Measure Your Savings!



Stock up and save today!

Visit www.restek.com/syringe

Melamine Kit	3
Leak Detector.....	4
EZ Twist Top.....	7
GC/MS Maintenance.....	7
Swagelok Fittings	8
Parts for ASE Fittings	9
Vacuum Bag Sampler	10

Rxi®-5Sil MS GC Columns.....	2
FREE Base Plate.....	4
ASE Extraction Cells	9
FREE Tedlar Bag	10
\$50 OFF Biphenyl LC Columns	13

Save a Life

(and your budget too!)

**Extend instrument lifetime and
reduce downtime for repairs.**

See page 5 for details.



USP Residual Solvents Standards

**We have them on hand and ready
to ship within 24 hours.**

See page 10 for details.

**New
Lower
Prices!**



Subscribe online!

www.restek.com/essentials

What's New!

PLOT Columns	4
Swagelok® Fittings	6
7890 EZ Twist Top™	8
Canister Cleaning System	12
Melamine & Related Analog Standards	10

Great Savings!

Rxi® GC Columns	2
FREE Base Plate	7
Explosives Reference Materials	11
FREE Tedlar Bags	12
HPLC Detector Lamps	14
\$500 OFF Generators	16

Introducing NEW Q-sep™ 3000 Centrifuge for QuEChERS

See page 2 for details.



Subscribe online!
www.restek.com/essentials

Restek Electronic Leak Detector

Protect your data and
analytical column!

See page 9
for details!



What's New!

Q-sep™ 3000 Centrifuge.....	2
Parts for ASE® Systems	2
Q-sep™ QuEChERS Standards	4
Electronic Flowmeter	8
EZ No-Vent™	10
GC/MS Cleaning Kit	10

Great Savings!

PLOT Columns	6
FREE Base Plate	9
Ultra II LC Columns	12

Website : www.chromtech.net.au E-mail info@chromtech.net.au Tel No : +61 3 9762 2034 Fax No : +61 3 9761 1169



Introducing NEW Q-sep™ 3000 Centrifuge for QuEChERS

NEW!

- Meets requirements of AOAC and European QuEChERS methodology.
- Supports 50mL, 15mL, and 2mL centrifuge tubes.
- Small footprint requires less bench space.
- Safe and reliable—UL, CSA, and CE approved, 1-year warranty.

Priced to fit your laboratory's budget, the Q-sep™ 3000 Centrifuge is the first centrifuge specifically designed for QuEChERS methodology. This compact, quiet, yet powerful, unit spins at the 3000g force required by the European method.



Centrifuge includes 50mL tube carriers (6), 50mL conical tube inserts (6), 4-place 15mL tube carriers (6), and 2mL tube adaptors (24).

visit www.restek.com/quechers

Description	qty.	cat.#
Q-sep 3000 Centrifuge, 110V	ea.	26230
Q-sep 3000 Centrifuge, 220V	ea.	26231
Replacement Accessories		
50mL Tube Carrier for Q-sep 3000 Centrifuge	2-pk.	26232
4-Place Tube Carrier for Q-sep 3000 Centrifuge	2-pk.	26233
2mL Tube Adaptors for Q-sep 3000 Centrifuge	4-pk.	26234
50mL Conical Tube Insert for Q-Sep™ 3000 Centrifuge	6-pk.	26235

Extraction Cells and Replacement Parts for ASE® Systems

Parts for ASE® Systems available:

Autoseal Tip Assembly for ASE® 200 Systems
Diatomaceous Earth
Extraction Cell Parts for ASE® 200 Systems
Extraction Cell Parts for ASE® 300/100 Systems
Filters for ASE® 200 Extraction Cells, 20mm
Filters for ASE® 300/100 Extraction Cells, 30mm
PEEK™ Washers for ASE® 200 Systems
PEEK™ Washers for ASE® 300/100 Systems
Resprep™ Tools for ASE® Systems
Retaining Ring Pliers for ASE® 100/200/300 Systems
Sample Collection Bottles for ASE® 300/100 Systems, 250mL
Sample Collection Vials for ASE® 200 Systems, 60mL
NEW! Tubing Assembly for ASE® 200 Systems
Valves for ASE® 100/200/300 Systems

Great Prices & Quick Delivery!

NEW Extraction cells now serialized!



2 Website : www.chromtech.net.au E-mail info@chromtech.net.au Tel No : +61 3 9762 2034 Fax No : +61 3 9761 1169



Air Monitoring

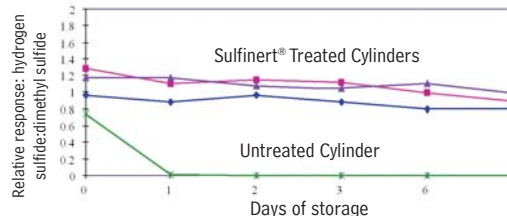
Sulfinert® Sample Cylinders & Valves

- Stable storage of sulfur and mercury at ppb levels.
- Refinery and natural gas process sampling.
- Inert coating doesn't flake; more durable than Teflon®.
- Cylinders available from 75cc to 2250cc and DOT rated to 1,800 or 5,000psig.
- Valves rated to 3,500 or 6,000psig.



Sulfur compounds are stable in Sulfinert® treated stainless steel systems.

17ppbv hydrogen sulfide in 500mL cylinders



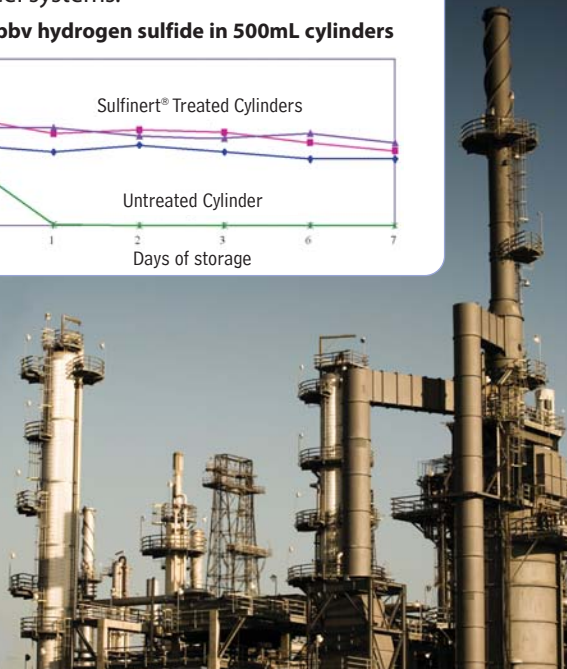
Sulfinert® Treated Alta-Robbins Sample Cylinder Valves

Description	DOT Pressure Rating	qty.	cat.#
1/4" Male NPT Outlet	6,000psig	ea.	22109

Sulfinert® Treated Ultra-High Pressure Sample Cylinders, 316L Stainless Steel

5,000psig			
Size	qty.	Swagelok part #	cat.#
150cc	ea.	316L-50DF4-150	22111
300cc	ea.	316L-50DF4-300	22112
500cc	ea.	316L-50DF4-500	22113

For additional cylinder sizes, pressure ratings and valve configurations, visit www.restek.com/air



Ultra-Clean Resin

Equivalent to XAD-2 Resin;
Exclusively from Restek!

- Eliminates the hassle of cleaning and testing before semi volatile sampling.
- Cleaned, GC tested and certified by TO-13A protocol.
- Quantity discounts available.

method applications

- Dioxins
- PAHs



Description	cat.#	Price-per-bottle		
		1-4 bottles	5-9 bottles	10+ bottles
Ultra-Clean Resin, 100 grams	24230	/ea.	/ea.	/ea.

PATENTS & TRADEMARKS

Restek patents and trademarks are the property of Restek Corporation. Other trademarks appearing in Restek literature or on its website are the property of their respective owners.



2nd Source TO-14A/TO-15 Gas Calibration Standards

- Standards from TWO manufacturers provides second source standards on one order.
- 12 month stability in transportable cylinders.
- Drop shipped for fast delivery and maximum shelf life.



A. Spectra 104L Cylinders

B. Scotty 110L Cylinders (Pi-marked Cylinders for EU Regulations)

NEW!

Naphthalene now added to Mass APH Mix and TO-15 Mix at no extra cost!

3 Website : www.chromtech.net.au E-mail: info@chromtech.net.au Tel No : +61 3 9762 2034 Fax No : +61 3 9761 1169

visit www.restek.com/air for more information on Restek air products

QuEChERS

Quick, Easy, Cheap, Effective, Rugged and Safe!

Extraction and dSPE Q-sep™ Tubes for pesticide residue analysis from food products



NEW!

NEW! Exclusively at Restek:
**Internal Standards and
Quality Control Standards**
to support QuEChERS Methods!

QuEChERS Internal Standard Mix for GC/ECD Analysis

PCB 18 tris-(1,3-dichloroiso
PCB 28 propyl)phosphate
PCB 52
50µg/mL each in acetonitrile, 5mL/ampul
cat. # 33265 (ea.)

QuEChERS Internal Standard Mix for GC/MS Analysis

PCB 18	50µg/mL	tris-(1,3-dichloroisopropyl)	
PCB 28	50	phosphate	50
PCB 52	50	triphenylmethane	10
triphenyl phosphate	20		
In acetonitrile, 5mL/ampul			
cat. # 33267 (ea.)			

QuEChERS Internal Standard Mix for GC/NPD and LC/MS/MS Analysis

triphenyl phosphate	20µg/mL
tris-(1,3-dichloroisopropyl)phosphate	50µg/mL
In acetonitrile, 5mL/ampul	
cat. # 33266 (ea.)	

QuEChERS Internal Standard Mix for LC/MS/MS Analysis

nicarbazin
10 μ g/mL in acetonitrile, 5mL/ampul
cat. # 33261 (ea.)

QuEChERS Quality Control Standards for GC/MS Analysis

Cat.# 33268: PCB 138 & PCB 153	Cat.# 33264: anthracene
50µg/mL each in acetonitrile, 5mL/ampul	cat. # 33268 (ea.)
100µg/mL in acetonitrile, 5mL/ampul	cat. # 33264 (ea.)

QuEChERS Single-Component Reference Standards

Concentration is $\mu\text{g/mL}$. Solvent: Acetonitrile (ACN)

Compound	Conc.	cat.# (ea.)	price
PCB 18 (5mL)	50	33255	
PCB 28 (5mL)	50	33256	
PCB 52 (5mL)	50	33257	
PCB 138 (5mL)	50	33262	
PCB 153 (5mL)	50	33263	
triphenylmethane (5mL)	10	33260	
triphenylphosphate (5mL)	20	33258	
tris(1,3-dichloroisopropyl) phosphate (5mL)	50	33259	

Save time and money with Restek's convenient mixes!

Complete Product Offering

to support

AOAC (2007.01) & European (EN15662) QuEChERS Methods

- Comprehensive portfolio of QuEChERS tubes.
- Method-specific internal and QC standards.
- Rxi®-5Sil MS Capillary column
- Ultra Aqueous C18 LC Column.

At Risk for Melamine

Meet new FDA guidance for melamine contamination in at-risk pharmaceutical components.

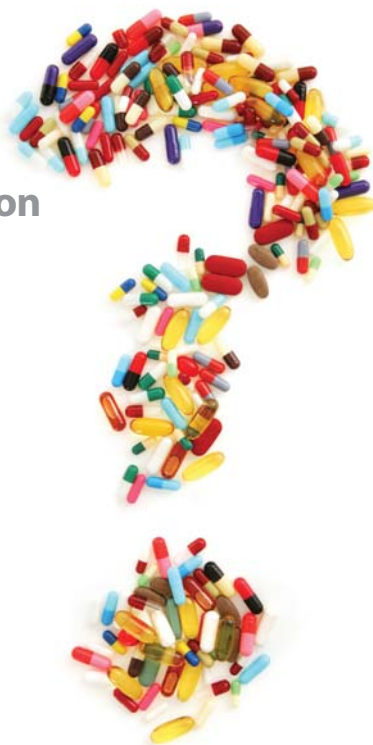
Melamine Analysis Kitcat. # 33254 (kit)

Detect melamine and related compounds by GC/MS with a complete analysis kit. Consistent with FDA procedure and new guidance for at-risk pharmaceutical components.

Kit includes (also sold individually):

- **Rxi®-5Sil MS with 5 meter Integra Guard™ Column**
- **Standards**
- **Derivatization Reagent**
- **Accessory Tubes and Syringe Filters**
- **Easy-to-Follow Instructions** with procedural check list to simplify laboratory documentation!

SAVE
when you
buy as a kit



Keep up with advances in melamine analysis at www.restek.com/melamine

USP Residual Solvents Standards

USP-Equivalent Standards

to Achieve USP <467> Compliance

Residual Solvents - Class 1

(5 components)

In dimethyl sulfoxide, 1mL/ampul

cat. # 36279 (equivalent to USP#1601102) (ea.)

Residual Solvents Class 2 - Mix B

(8 components)

In dimethyl sulfoxide, 1mL/ampul

cat. # 36280 (equivalent to USP#1601292) (ea.)

Residual Solvents Class 2 - Mix A

(15 components)

In dimethyl sulfoxide, 1mL/ampul

cat. # 36271 (equivalent to USP#1601281) (ea.)

Residual Solvents Class 2 - Mix C

(8 components)

In dimethyl sulfoxide, 1mL/ampul

cat. # 36273 (equivalent to USP#1601306) (ea.)

**In
Stock
Now!**



Get more on **RESIDUAL SOLVENTS** at www.restek.com/ovi

5 Website : www.chromtech.net.au E-mail info@chromtech.net.au Tel No : +61 3 9762 2034 Fax No : +61 3 9761 1169

contact your Restek representative today!

Rxi®-5Sil MS Columns

Exceptionally Inert Columns for GC/MS and Trace Level Analyses

- Low bleed at high temperatures, for higher sensitivity and lower detection limits.
- Excellent inertness for highest signal of acidic, basic and high polar compounds.
- Superior reproducibility: each column has the same Rxi®-quality.

(Crossbond®, selectivity close to 5% diphenyl/95% dimethyl polysiloxane)

ID	df (μm)	temp. limits	length	cat. #
0.18mm	0.18	-60 to 330/350°C	20-Meter	43602
0.18mm	0.36	-60 to 330/350°C	20-Meter	43604
0.25mm	0.25	-60 to 330/350°C	30-Meter	13623
0.25mm	0.25	-60 to 330/350°C	60-Meter	13626
0.25mm	0.50	-60 to 330/350°C	30-Meter	13638
0.32mm	0.50	-60 to 330/350°C	30-Meter	13639

Do you want to extend column lifetime and prevent column coupling?

Try Rxi®-5Sil MS with Integra Guard!
Get the protection without the connection!

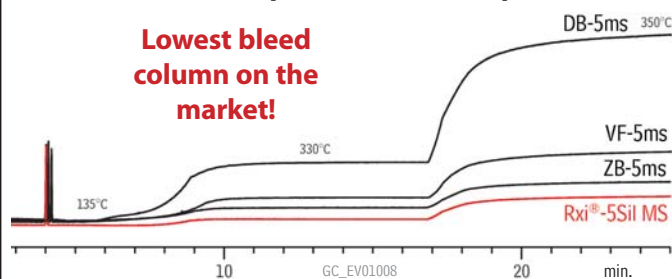


Make the Switch to Rxi® columns!

Experience what Rxi® did for many others

- Lower detection limits
- Better peak shape
- Accurate results

Rxi®-5Sil MS Competitor Bleed Comparison



Increase reliability of your data
by upgrading to Rxi® quality.

Rxi®-5HT Columns

**Lowest Bleed, Most Inert
High Temperature Column!**

Replace DB-5HT, Inferno, and VF5HT
and benefit from better data!

nonpolar phase; 5% diphenyl/95% dimethylpolysiloxane

ID	df (μm)	temp. limits	length	cat. #
0.25mm	0.10	-60 to 400°C	15-Meter	13905
0.25mm	0.10	-60 to 400°C	30-Meter	13908
0.25mm	0.25	-60 to 400°C	30-Meter	13923
0.32mm	0.10	-60 to 400°C	15-Meter	13906
0.32mm	0.10	-60 to 400°C	30-Meter	13909
0.32mm	0.25	-60 to 400°C	30-Meter	13924
0.53mm	0.15	-60 to 400°C	30-Meter	13910

Rxi®-35Sil MS Columns

**Selective, inert column for
ongoing trace analysis of
semivolatiles!**

midpolarity phase; equivalent to 35% phenyl methylpolysiloxane

ID	df (μm)	temp. limits	length	cat. #
0.25mm	0.25	50 to 340/360°C	30-Meter	13823
0.32mm	0.25	50 to 340/360°C	30-Meter	13824
0.53mm	0.50	50 to 320/340°C	30-Meter	13840

Rxi®-XLB Columns

**Get longer life time while
enjoying better peak shape!**

low polarity proprietary phase

ID	df (μm)	temp. limits	length	cat. #
0.18mm	0.18	30 to 340/360°C	20-Meter	43702
0.25mm	0.25	30 to 340/360°C	15-Meter	13720
0.25mm	0.25	30 to 340/360°C	30-Meter	13723
0.25mm	0.25	30 to 340/360°C	60-Meter	13726
0.25mm	0.50	30 to 340/360°C	30-Meter	13738
0.25mm	1.00	30 to 340/360°C	30-Meter	13753
0.32mm	0.25	30 to 340/360°C	30-Meter	13724
0.32mm	0.50	30 to 340/360°C	30-Meter	13739
0.53mm	0.50	30 to 340/360°C	30-Meter	13740

*Maximum temperatures listed are for 15- and 30-meter lengths. Longer lengths may have a slightly reduced maximum temperature.



phases available

- Rxi®-1ms
- Rxi®-5ms
- Rxi®-5Sil MS
- Rxi® guard/retention gap columns
- Rxi®-35Sil MS
- Rxi®-17
- Rxi®-XLB



RESTEK  REFINED

Next Generation PLOT Columns

Keep retention times stable and minimize GC down time using improved PLOT columns

Restek has developed new procedures to manufacture PLOT columns with concentric stabilized adsorption layers. The new generation PLOT columns show a constant flow behavior and have significantly improved mechanical stability, resulting in easier operation, more reproducible retention times, and reduced particle release.

NEW!

advanced technology

PLOT Columns (fused silica)

- Rt[®]-Q-BOND
- Rt[®]-QS-BOND
- Rt[®]-S-BOND
- Rt[®]-U-BOND
- Rt[®]-Alumina BOND/Na₂SO₄
- Rt[®]-Alumina BOND/KCl
- Rt[®]-Msieve 5A
- MXT[®]-Msieve 5A

(Siltek[®]-treated stainless steel PLOT)



Get Standards to support ASTM methods!

D3606 • Oxygenates Setup • PIANO • SimDist • PONA VI

**NOW
ON SALE**
Restek PLOT
Columns
through the end
of 2009!



tech tip

Do you want to use valve injection or switching?

For this application, Restek bonded PLOT columns outperform any other PLOT column.

- **Best performance**
- **Best reproducibility**
- **Best price**

DHA analysis: Trouble with tailing alcohol peaks is over...

Rtx[®]-1-PONA

- **Sharp alcohol peaks: correct and accurate data**
- **Each column tested to ASTM 6730 specifications**
- **Guaranteed Performance: Temperature ranges up to 300°C for elution of higher hydrocarbons.**

Restek developed a unique deactivation technology, that makes alcohols elute as sharp peaks in detailed hydrocarbon analysis, as published by ASTM D6730. Columns are stable up to 300°C and are extremely reproducible. Restek is the **ONLY** company that individually tests for ASTM specifications.

Rtx[®]-1PONA Column (fused silica)

(Crossbond[®] 100% dimethyl polysiloxane—optimized for hydrocarbon analysis)

ID	df (μm)	temp. limits	length	cat. #
0.20mm	0.50	-60 to 300/340°C	50-Meter	10146
0.25mm	0.50	-60 to 300/340°C	100-Meter	10195
0.25mm	0.50	-60 to 300/340°C	150-Meter	10197

Rtx[®]-5PONA Tuning Column (fused silica)

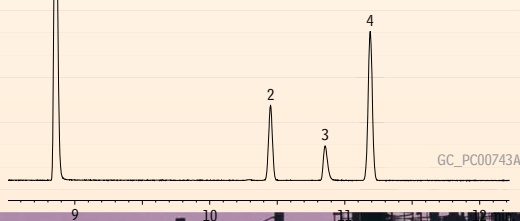
(Crossbond[®] 5% diphenyl/95% dimethyl polysiloxane)

ID	df (μm)	temp. limits	length	cat. #
0.25mm	1.0	-60 to 325°C	5-Meter	10196

Rtx[®]-1PONA column produces sharp symmetrical alcohol peaks!

1. ethanol
2. C5
3. *tert*-butanol
4. 2-methylbutene-2

C5 efficiency: 613,596 total theoretical plates
k' (C5): 0.489
tert-butanol skewness: 1.25
Resolution (*tert*-butanol/2-methylbutene-2): 5.60



Column: Rtx[®]-1PONA, 100m, 0.25mm ID, 0.5μm (cat.# 10195) plus Rtx[®]-5PONA tuning column, 2.62m, 0.25mm ID, 1.0μm, connected via Press-Tight[®] connector (cat.# 20446) Sample: custom detailed hydrocarbons analysis (DHA) mix, neat For full analytical conditions visit restek.com and search for GC_PC00743A

Meet & exceed ASTM D6730, including alcohols!



tech tip

Don't forget:
The ASTM D6730 method also requires a tuning column.

Restek offers this also as the 5m Rtx[®]-5PONA tuning column.



Got Sulfur?

Get Sulfinitert[®] Treated Sample Cylinders!
see page 3 for details



Lab Gas Issues?

RESTEK HAS THE SOLUTION!

MEASUREMENT



Introducing the **NEW** Restek **ProFLOW 6000** Electronic Flowmeter

The ProFLOW 6000 is an electronic device capable of measuring bidirectional volumetric flow for most gases. Real-time measurements can be made for various types of flow paths, including continually changing gas types.

Additional state-of-the-art features include:

- Measures volumetric flow for all gases across a range of 0.5-500 mL/min.
- NIST traceable calibration
- Explosion-proof rating for flammable and explosive gases
- Accuracy of $\pm 2\%$ of flow or ± 0.05 mL/min., whichever is greater
- Over range warning indicator
- Auto shut-off feature
- Use as a bench-top or hand-held unit
- Ergonomic design and side grips for comfort
- Measures most gas types
- Convenient carrying/storage case included
- CE certified
- Uses 2-AA batteries
- Data output via USB port
- Re-calibration service available
- 1-year warranty

**Coming
Soon!**

Description

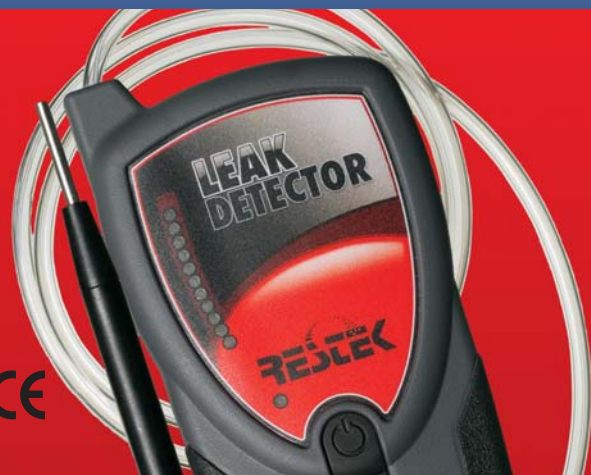
Restek ProFLOW 6000 Electronic Flowmeter
Soft-Side Storage Case

qty. cat.#

ea. 22656
ea. 22657

Go to www.restek.com/flowmeter for details.

DETECTION



Restek Electronic Leak Detector

Protect your data and analytical column!

High temperature methods are extremely sensitive to carrier gas impurities, such as water and oxygen. Make sure you have clean carrier gas and frequently check connections and injection system fittings for leaks using a Restek electronic leak detector.

Leak Detector with Universal Charger Set
(US, UK, European, Australian)

Cat.# 22839

www.restek.com/leakdetector

REGULATION

Ultra-High Purity (UHP) Gas Regulators

Most stable outlet pressure control with no secondary pressure regulation needed.

Dual-Stage, Chrome-Plated

Fitting	qty.	cat.#
CGA 580 (N ₂ , He, Ar)	ea.	21667
CGA 350 (H ₂ , P ₂)	ea.	21668
CGA 590 (Air)	ea.	21669

Dual-Stage, Stainless Steel

Fitting	qty.	cat.#
CGA 580 (N ₂ , He, Ar)	ea.	20662
CGA 350 (H ₂ , P ₂)	ea.	20663
CGA 590 (Air)	ea.	20664

Single-Stage, Chrome-Plated Brass

Fitting	qty.	cat.#
CGA 580 (N ₂ , He, Ar)	ea.	20646
CGA 350 (H ₂ , P ₂)	ea.	20647
CGA 590 (Air)	ea.	20648

Single-Stage, Stainless Steel

Fitting	qty.	cat.#
CGA 580 (N ₂ , He, Ar)	ea.	20665
CGA 350 (H ₂ , P ₂)	ea.	20666
CGA 590 (Air)	ea.	20667



Inlet gauge: 0 to 4,000psig (0-27,579kPa)
 Outlet assembly: diaphragm valve, 1/4" tube fitting
 Outlet pressure: 0 to 100psig (0-689kPa)
 Outlet gauge: 30" — 0 to 200psig (0-1379kPa)

**Compare
and SAVE!**

Visit www.restek.com for more information on Gas Regulators.

PURIFICATION

Super-Clean Gas Filter and Base Plate Kit

FREE Base Plate
with purchase of 2 triple or 2-fuel filters

Description	qty.	cat.#
Restek Exclusive Triple Filter Kit: includes 2 triple filters & free base plate	kit	22859-409
Restek Exclusive Fuel Gas Filter Kit: includes 2 fuel gas filters & free base plate	kit	20529-409

Offer valid through Dec. 31, 2009. Cannot be combined with other offers or discounts.



11Website : www.chromtech.net.au E-mail info@chromtech.net.au Tel No : +61 3 9762 2034 Fax No : +61 3 9761 1169



GC/MS Essentials

EZ No-Vent™ GC Column-Mass Spectrometer Connector for Shimadzu GCs

- Change GC/MS columns in minutes without venting—100µm transfer line throttles vacuum and eliminates the need to vent.
- Easy to install and maintain—no special tools or plumbing required.
- Gold-plated body for inertness.
- Deactivated transfer line keeps analytes focused.
- High-temperature aluminum ferrules eliminate leaks at the transfer line fitting.
- Lower cost than other “no-vent” fittings.
- Can be used on Shimadzu QP 2010 and QP 2010 Plus mass spectrometers.



Description	qty.	cat.#
EZ No-Vent Connector Kit for Shimadzu QP 2010 & QP 2010 Plus (Kit includes: EZ No-Vent Connector, two 0.4mm ID polyimide ferrules for capillary column, two 0.4mm ID aluminum ferrules for transfer line, 100µm deactivated transfer line (3 ft.), column plug, capillary nut. Replacement ferrules for connecting capillary column to EZ No-Vent Connector:	kit	22431
0.4mm ID (Polyimide)	2-pk.	21015
0.5mm ID (Polyimide)	2-pk.	21016
Replacement ferrules for connecting transfer line to EZ No-Vent Connector: 0.4mm ID (Aluminum)	2-pk.	22432
Replacement 100µm deactivated transfer line	3 ft.	21018
Replacement EZ No-Vent Capillary Nut	5-pk.	21900
Replacement EZ No-Vent Plug	2-pk.	21915
Open-End Wrenches (1/4" x 5/16")	2-pk.	20110

For other instrument specific EZ No-Vent™ connectors, visit www.restek.com

Inland 45 Pump Oil

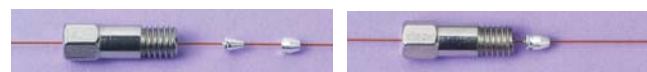
- Recommended for optimum mass spec performance.



Description	Similar to Agilent part #	qty.	cat.#
Inland 45 Pump Oil	6040-0834	1 liter	24819

Alumaseal® Ferrules*

- Aluminum construction.
- Unique two-piece design permanently locks on fused silica tubing without causing breakage.
- Stable to 550°C.
- Use with any 1/16" compression-type fitting.
- Will not crack or fragment.
- Excellent for GC/MS.



Ferrule ID	Fits Column ID	qty.	cat.#
0.4mm	0.25mm	10-pk.	21472
0.5mm	0.32mm	10-pk.	21473
0.8mm	0.53mm	10-pk.	21474

*Patent pending.

Restek MSD Source Nut

- 1.2mm nut bore permits easy removal of ferrules with a standard tapered-needle file.
- Design enhances ease of threading onto the transfer line and improves overall lifetime.



Improved design!

Description	Similar to Agilent part #	qty.	cat.#
(Detector) MSD Source Nut	05988-20066	2-pk.	20643

GC/MS Cleaning Kit

Poor sensitivity, loss of sensitivity at high masses, or high multiplier gain during an auto tune are all indicators that your mass spectrometer source may need to be cleaned. Restek has assembled all of the necessary components for cleaning and polishing your ion source.



Description	qty.	cat.#
Mass Spec Cleaning Kit with Dremel Tool	kit	27194
Mass Spec Cleaning Kit without Dremel Tool	kit	27195
Mass Spec Cleaning Kit Replacement Parts Kit (includes cloths, micro mesh sheets, small and large gloves)	kit	27196

Measure Your Savings!

Great
Prices,
Great
Products!

Stock up and save today!
Visit www.restek.com/syringe



Custom Coatings for Ultimate Inertness!

Siltek® Deactivation for Liners

Patented Siltek® deactivation process for liners produces a highly inert glass surface that features high temperature stability, extreme durability, and low bleed.

- Maximizes the inertness of the sample pathway with proprietary deactivation.
- Minimizes breakdown.
- Low bleed.
- Thermally stable.
- "Clean and green"—manufactured without the use of harmful organic solvents.
- Ideal for chlorinated pesticides.

For Siltek® deactivated inlet liners, add the corresponding suffix number to the liner catalog number.

qty.	Siltek Liner		Siltek Liner w/Wool		Siltek Liner w/CarboFrit	
each	-214.1	addl. cost	-213.1	addl. cost	-216.1	addl. cost
5-pk.	-214.5	addl. cost	-213.5	addl. cost	-216.5	addl. cost
25-pk.	-214.25	addl. cost	-213.25	addl. cost	-216.25	addl. cost

Restek can coat most any
chromatography parts including:

- liners
- instrument parts
- sample loops
- fittings
- vials
- tubing





Ultra IITM LC Columns

Universal application for **Any LC System**, providing scalability and unsurpassed selectivity on a wide range of particle sizes.



Add -712 to end of part number to receive this discount.
Offer ends 3/31/2010



Available Phases:

- C18
- Biphenyl
- Aromax
- Silica
- Carbamate
- C8
- PFP Propyl
- Aqueous C18
- IBD

Available Particle Sizes:

- 1.9µm for UHPLC
- 2.2µm for UFLC and RRLC
- 3µm and 5µm for HPLC

www.restek.com/ultra2

More phases coming soon!

Save on Preventive Maintenance Kits & Parts for Agilent & Waters Systems

Description for Agilent LCs	Model #	Similar to Agilent part #	qty.	cat.#
Preventive Maintenance Kit	1050	01078-68721	kit	25259
Autosampler Preventive Maintenance Kit	1100	G1313-68709	kit	25271
Pump Maintenance Kit for Agilent	1050, 1100	G1311-68710	kit	25270
Description for Waters LCs	Model #	Similar to Waters part #	qty.	cat.#
Preventive Maintenance Kit	Alliance 2690, 2695	WAT270944	kit	25143
Pump Preventive Maintenance Kit	600 Pump	WAT052675	kit	25144
Autosampler Preventive Maintenance Kit	717 Autosampler	WAT052669	kit	25145
Pump Preventive Maintenance Kit	616 Pump	WAT052672	kit	25146
Preventive Maintenance Kit	515 Pump	WAT052587	kit	26519
PerformancePLUS Check Valve Cartridge	M6KA, 501, 510, 515, 590, 600E	700000254	2-pk.	25370



Replacement parts are also available for PerkinElmer, Shimadzu, Thermo Scientific, Beckman & Hitachi HPLC Systems at very affordable prices.

14/Website : www.chromtech.net.au E-mail info@chromtech.net.au Tel No : +61 3 9762 2034 Fax No : +61 3 9761 1169



Mobile Phase Management

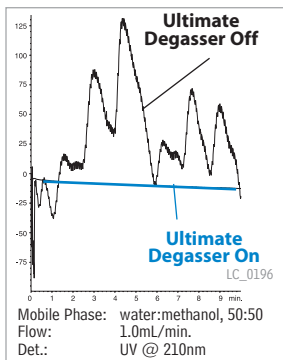
Mobile Phase Degasser

In-line vacuum degassing

- Prevents oxygen from causing flow rate instability and baseline noise.
- Prevents bubbles from forming in check valves, at connections, or in detector flow cells.
- More effective than sonication or helium sparging.



Degasys Ultimate Degasser provides highly stable baselines



Specifications:

Residual Oxygen ¹	0.9ppm
Pressure Loss ¹	0.24psi (1.65kPa)
Internal Volume	500μL

¹At a flow rate of 1mL/min.

Wetted Parts	Teflon AF, PTFE, ETFE, PPS
Max Flow Rate	7mL/min./channel

Description	qty.	cat.#
110V Mobile Phase Degasser (4 Channel, 7mL/min./channel)	ea.	25189
220V Mobile Phase Degasser (4 Channel, 7mL/min./channel)	ea.	25194

To prevent system damage, do not use the Degasys system with solutions containing TFA at concentrations greater than 5%.

Waste Overflow Indicator for HPLC Systems

- Audible alarm instantly alerts user, preventing overflow.
- Compact, battery-operated unit.

The new Restek Waste Overflow Indicator will help to keep your mobile phase waste where it belongs—in the waste container!



Description	qty.	cat.#
Waste Overflow Indicator	kit	26543
Replacement AA Battery	ea.	26544
Replacement AA Batteries	3-pk.	26545

Hub-Cap 4 Liter Bottle Tops, Adapters, & Filter Kit

Hub-Cap bottle tops are great at keeping your mobile phase lines where they belong and seal your bottles more effectively than parafilm, aluminum foil, or tape. Adapters are designed to use with the Opti-Cap™ on 4L solvent bottles.



Description	qty.	cat.#
Hub-Cap (includes bottle cap and plug)	ea.	26541
Hub-Cap Multi-pack	3-pk.	26542
Hub-Cap 4L Bottle Adapter	ea.	26538
Hub-Cap 4L Bottle Adapter Multi-pack	3-pk.	26539
Hub-Cap 4L Bottle Adapter and Opti-Cap	ea.	26540
Hub-Cap Filter Kit for 4L or Wheaton bottles	kit	26395
Replacement Membrane Filters	qty.	cat.#
Polypropylene Membrane Filters, 47mm, 0.45μm	100-pk.	26396
Polypropylene Membrane Filters, 47mm, 0.22μm	100-pk.	26397
Nylon Membrane Filters, 47mm, 0.45μm	100-pk.	26398
Nylon Membrane Filters, 47mm, 0.22μm	100-pk.	26399

Opti-Cap™ Bottle Top

The most economical way to helium-sparge and deliver HPLC mobile phases. The Opti-Cap™ top fits all standard GL-45 bottles and has two 1/8-inch holes and one 1/16-inch hole for tubing. All 3 openings are designed for threaded PEEK™ plug.

Bottle not included.



Description	qty.	cat.#
Opti-Cap (Cap and PEEK Plug)	ea.	25300



Super Septa!

- Precision molded.
- Preconditioned and ready to use.
- Packaged in precleaned jars.

Restek Thermolite® Septa

Usable to 340°C inlet temperature.

Restek IceBlue® Septa

Usable to 250°C inlet temperature.

BTO® Septa

Usable to 400°C inlet temperature.



Visit www.restek.com/septa for a complete listing of septa available.



Lit. Cat.# GNES1150-INT

2009 v.7

© 2009 Restek Corporation.



Rxi[®] 3-in-1 Technology

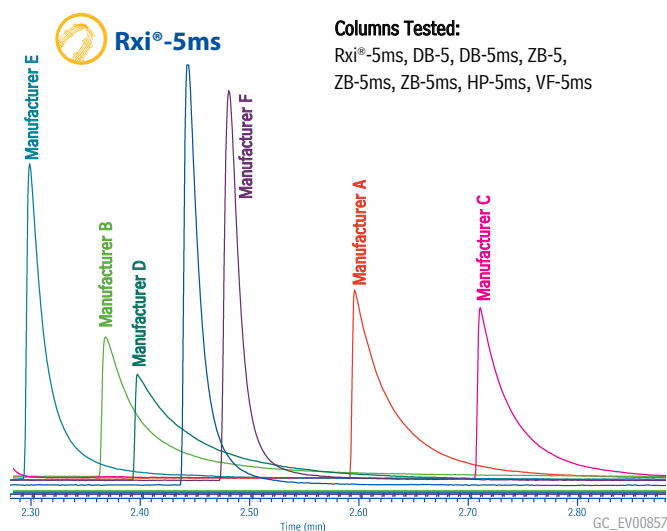
Highest Inertness • Lowest Bleed • Exceptional Reproducibility

Save
25%
on selected
Rxi[®] Columns

Offer expires
June 30, 2009

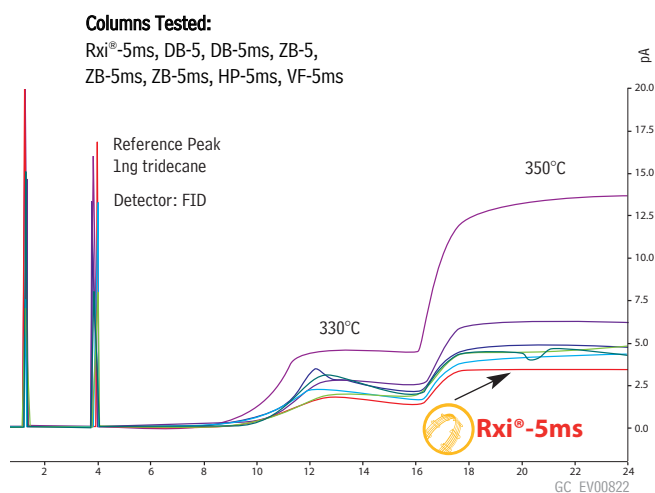
Highest Inertness

Excellent peak symmetry gives maximum response and predictable retention times for active compounds at trace levels.



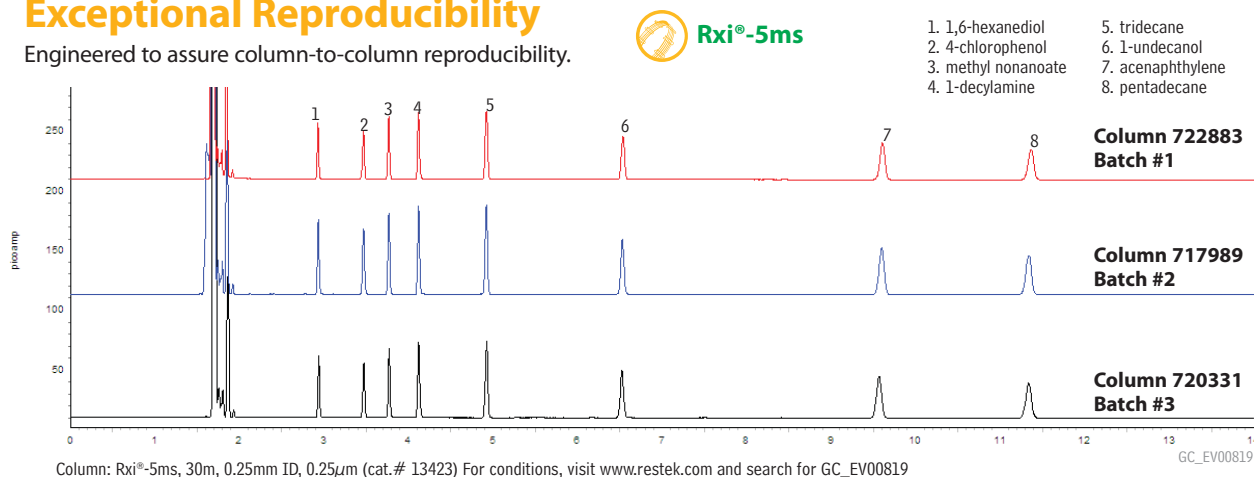
Lowest Bleed

More stable at higher temperatures than other manufacturer's columns, for better accuracy and lower detection limits.



Exceptional Reproducibility

Engineered to assure column-to-column reproducibility.



Make the Switch to Rxi columns!

Rxi® Equivalency

	Rxi®-5ms	Rxi®-5Sil MS	Rxi®-1ms
Restek	Rtx-5	Rtx-5Sil MS	
Agilent	HP-5, HP-5ms,		HP-1, HP-1ms,
	DB-5, Ultra-2	DB-5ms	DB-1, DB-1ms
		VF-5ms,	VF-1ms,
Varian	CP-Sil 8 CB	CP-Sil 8 CB LB/MS	CP-Sil 5 CB LB/MS
Alltech	AT-5	AT-5ms	AT-1
Phenomenex	ZB-5	ZB-5ms	ZB-1, ZB-1MS



phases available

- Rxi®-1ms
- Rxi®-5ms
- Rxi®-5Sil MS
- Rxi® guard/retention gap columns
- Rxi®-35Sil MS
- Rxi®-17
- Rxi®-XLB

Rxi®-1ms Columns (fused silica)

(Crossbond® 100% dimethyl polysiloxane) Temp. range: -60°C to 330/350°C

Description	cat.#	list price	sale price
0.25mm ID, 0.25µm, 30-Meter	13323-R25		
0.25mm ID, 0.25µm, 60-Meter	13326-R25		
0.32mm ID, 0.25µm, 30-Meter	13324-R25		
0.32mm ID, 1.00µm, 30-Meter	13354-R25		
0.32mm ID, 1.00µm, 60-Meter	13357-R25		

Rxi®-5ms Columns (fused silica)

(Crossbond® 5% diphenyl/95% dimethyl polysiloxane) Temp. range: -60°C to 330/350°C

Description	cat.#	list price	sale price
0.25mm ID, 0.25µm, 30-Meter	13423-R25		
0.25mm ID, 0.25µm, 60-Meter	13426-R25		
0.25mm ID, 0.50µm, 30-Meter	13438-R25		
0.25mm ID, 1.00µm, 30-Meter	13453-R25		
0.32mm ID, 0.25µm, 30-Meter	13424-R25		

Rxi®-5Sil MS Columns (fused silica)

(Crossbond®, selectivity close to 5% diphenyl/95% dimethyl polysiloxane)
Temp. range: -60°C to 350°C

Description	cat.#	list price	sale price
0.25mm ID, 0.25µm, 30-Meter	13623-R25		
0.25mm ID, 0.25µm, 60-Meter	13626-R25		
0.25mm ID, 0.50µm, 30-Meter	13638-R25		
0.25mm ID, 1.00µm, 60-Meter	13697-R25		
0.32mm ID, 0.50µm, 30-Meter	13639-R25		

Offer expires June 30, 2009

visit www.restek.com/rxi for a complete Rxi® product listing



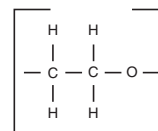
Stabilwax® Columns

(Crossbond® Carbowax® polyethylene glycol)

- Excellent inertness for active compounds.
- 260°C maximum operating temperature.

ID	df (µm)	temp. limits	length	cat. #	price
0.25mm	0.25	40 to 250/260°C	30-Meter	10623	
0.32mm	0.25	40 to 250/260°C	30-Meter	10624	
0.32mm	0.50	40 to 250/260°C	30-Meter	10639	
0.32mm	1.00	40 to 240/260°C	30-Meter	10654	
0.53mm	1.00	40 to 240/260°C	30-Meter	10655	

Stabilwax® Structure



manufacturing
procedure

Guaranteed column-to-column
reproducibility

Visit www.restek.com for a complete listing of Stabilwax® Columns.



New Stabilized PLOT Columns

Minimize Particle Release— Safe for Deans Switching Applications

NEW!**advanced
technology**

Restek has developed new procedures to manufacture PLOT columns with concentric stabilized adsorption layers. The new generation PLOT columns show a constant flow behavior and have significantly improved mechanical stability, resulting in easier operation, more reproducible retention times, and reduced particle release.



Rt®-Q-BOND Columns (fused silica PLOT) 100% divinylbenzene

ID	df (μm)	temp. limits	15-Meter	30-Meter
0.32mm	10	to 300/320°C	19743	19744
0.53mm	20	to 300/320°C	19741	19742

Rt®-QS-BOND Columns (fused silica PLOT) porous divinyl benzene homopolymer

ID	df (μm)	temp. limits	15-Meter	30-Meter
0.32mm	10	to 250°C	19739	19740
0.53mm	20	to 250°C	19737	19738

Rt®-S-BOND Columns (fused silica PLOT) divinylbenzene 4-vinylpyridine

ID	df (μm)	temp. limits	15-Meter	30-Meter
0.32mm	10	to 250°C	19747	19748
0.53mm	20	to 250°C	19745	19746

Rt®-U-BOND Columns (fused silica PLOT)

divinylbenzene ethylene glycol/dimethylacrylate

ID	df (μm)	temp. limits	15-Meter	30-Meter
0.32mm	10	to 190°C	19751	19752
0.53mm	20	to 190°C	19749	19750

Rt®-Alumina BOND Columns (fused silica PLOT) (Na₂SO₄ deactivation)

ID	df (μm)	temp. limits	30-Meter	50-Meter
0.32mm	5	to 200°C	19757	19758
0.53mm	10	to 200°C	19755	19756

Rt®-Msieve 5A Columns (fused silica PLOT)

ID	df (μm)	temp. limits	15-Meter	30-Meter
0.32mm	30	to 300°C	19720	19722
0.53mm	50	to 300°C	19721	19723

MXT®-Msieve 5A (Siltek®-treated stainless steel PLOT)

ID	df (μm)	temp. limits	30-Meter
0.53mm	50	to 300°C	79723



Got Sulfur?

Sulfinert® treated
sample cylinders

- Stable storage of sulfur and mercury at ppb levels
- Inert coating doesn't flake; more durable than Teflon®
- DOT rated to 1,800 or 5,000 psi.

www.restek.com/air



Save a Life

(and your budget too!)

**Extend instrument lifetime instead
of buying new equipment.**

You'll save money and keep your LCs and GCs running smoothly for years to come with replacement parts, tools, kits, and protective products from Restek.

- **Get more for your money!** Original manufacturer component performance-at a fraction of the cost.
- **Make Life Easier!** Reduce downtime and simplify maintenance with Restek tools and kits.
- **Cut costs, not corners!** Protect your instrument with top quality filters, guards, and more.

Stock up on the supplies you need at
www.restek.com/savealife



We stock a full line of parts no longer available from the manufacturer.



Catch the Buzz



General



Environmental



Foods



Forensics



Pharma



Petro

Register for free chromatography e-newsletters at **www.restek.com/buzz**



HOT Tools

No more burned fingers!

The Claw & Holder Kit



- Easily removes hot liners from injection ports.
- 4mL vials (not included) can be changed out and disposed of when dirty.

Never again will you have to burn your fingers removing a hot injection port liner. The Claw safely and cleanly removes liners, O-rings, or other small objects from the injection port. You can then place the hot objects in a clean 4mL vial situated in the Claw holder until ready for reuse.

Description	qty.	cat. #	price
The Claw	ea.	26261	
The Claw Holder Kit (includes The Claw and holder)	kit	26262	
4.0mL Clear Vial, White Graduated Marking Spot	100-pk.	24658	

Hot Swap Capillary Column Nuts



Never worry again about burned fingers or having to wait for the injector to cool down. Now the Hot Swap Capillary Column Nut allows you to change your capillary column while the injector temp is still hot.

Description	qty.	cat.#	price
For use with "compact" Agilent-style ferrules.			
Hot Swap Capillary Column Nut	ea.	22348	
For use with standard 1/8"-type ferrules.			
Hot Swap Capillary Column Nut	ea.	22347	

NOTE: For proper operation, oven fan must be kept operational during change out or risk of burn may occur.



Swagelok® Fittings

Restek now carries a complete line of standard and coated Swagelok® fittings!



Save over 40% by purchasing one of our new Swagelok® stainless steel or brass fittings kits!

Visit us at www.restek.com for more information.

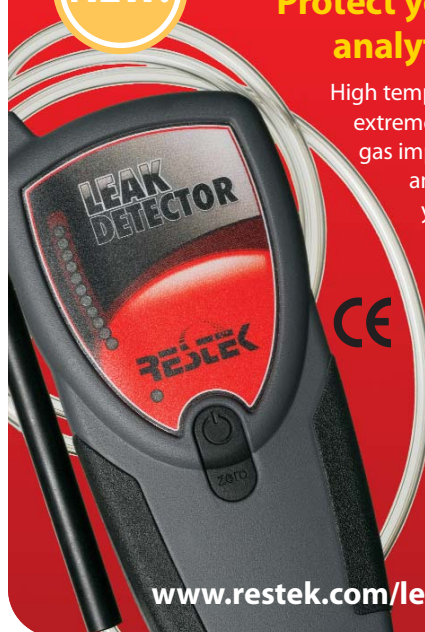


Restek Electronic Leak Detector

Protect your data and analytical column!

High temperature methods are extremely sensitive to carrier gas impurities such as water and oxygen. Make sure you have clean carrier gas and frequently check connections and injection system fittings for leaks using an electronic leak detector.

Leak Detector with Universal Charger Set (US, UK, European, Australian)
Cat.# 22839



www.restek.com/leakdetector

Super-Clean Gas Filter and Base Plate Kit

FREE Base Plate

with purchase of 2 triple filters

Save
\$200

Buy 2 triple filters and get a base plate FREE!

- Save over \$200.
- Filters provide 99.9999% pure gas.
- Quick connect fittings for easy, leak-tight filter changes.
- Traps measure 10⁵/₈" x 1³/₄" (27 x 4.4 cm).
- Base plate unit measures 4" x 4" x 1⁷/₈" (10.2 x 10.2 x 4.8 cm).
- Base plate includes 1/₈" brass fittings.

Description	qty.	cat.#	sale price
Restek Exclusive Triple Filter Kit: includes 2 triple filters & free base plate	kit	22859-409	

Offer valid through Dec. 31, 2009.
Cannot be combined with other offers or discounts.



Get Super-Clean!

For a complete listing of our Super-Clean Gas Filters and Base Plates, visit www.restek.com

Dual Vespel® Ring Inlet Seals

for Agilent GCs

NEVER USE A WASHER AGAIN!

Restek's patented Dual Vespel® Ring Inlet Seals offer a washerless, leak-tight seal and helps improve your inlet seal performance at the same price!

0.8mm ID Dual Vespel Ring Inlet Seal	2-pk./price	10-pk./price
Gold-Plated	21240	21241
Siltek Treated	21242	21243
Stainless Steel	21238	21239
1.2mm ID Dual Vespel Ring Inlet Seal	2-pk./price	10-pk./price
Gold-Plated	21246	21247
Siltek Treated	21248	21249
Stainless Steel	21244	21245

Save
10%
Order
10-packs!



Visit www.restek.com for all the features and benefits of this Restek innovation.



EZ Twist Top™ Split/Splitless Injection Port for Agilent 7890 GCs

- Change inlet liners faster, easier, and eliminate touching hot surfaces.
- Gas lines are attached to shell weldment bottom instead of the top.
- Gas lines don't interfere with routine maintenance.
- Weldment Removal Tool allows for removal of hot weldment without fingers touching hot surfaces.
- Weldment stays secure in the tool for reattachment.
- Eliminates kinked or broken gas lines.
- Available for all Agilent GC models.

**No more
damaged
gas lines!**

Get the EZ Twist Top™ ADVANTAGE

	Restek EZ Twist Top™	Agilent Flip Top
Eliminate damaged gas lines	✓	
Siltek deactivation for enhanced inertness & durability	✓	
Avoid touching hot metal surfaces—Weldment tool included	✓	

NEW!

**Designed
for drop in
installation!**

EZ Twist Top™ Split/Splitless Injection Port for Agilent 7890 GCs

Description	qty.	cat.#	price
Injection port assembly kit includes: shell weldment, 2 weldment O-rings, Siltek Dual Vespel Ring inlet seal, septum nut, reducing nut, stainless steel capillary nut and weldment tool	kit	22177	
Siltek injection port assembly kit includes: Siltek shell weldment, 2 weldment O-rings, Siltek Dual Vespel Ring inlet seal, septum nut, reducing nut, stainless steel capillary nut and weldment tool	kit	22178	

Not available in
Germany or Japan.

The EZ Twist Top™ and replacement parts are available for all Agilent Injection Ports.
For more information, visit www.restek.com and search for EZ Twist Top™

Inlet Liners

We have what you need!

Restek carries a complete line of instrument specific liners. Visit us online under GC Accessories to view our liners for **Agilent, Shimadzu, PerkinElmer, Thermo Scientific,** and **Varian** GCs.

Visit www.restek.com/liners for a complete listing of inlet liners available.



**Save
up to 25%
Order
25-packs!**



Sample Preparation

QuEChERS



Quick, Easy, Cheap, Effective, Rugged and Safe!

SPE Tubes for pesticide residue analysis from food products

- Fast, simple sample extraction and cleanup using dSPE.
- Fourfold increases in sample throughput.
- Fourfold decreases in material cost.
- Convenient, ready to use centrifuge tubes with ultra pure, preweighed adsorbent mixes.



Description	Material	Methods	qty.	cat#	price
50mL Centrifuge Tubes for Sample Extraction					
Resprep Q110	4g MgSO ₄ , 1g NaCl, 1g trisodium citrate dihydrate, .5g disodium hydrogenecitrate sesquihydrate	Mini-Multiresidue, European prEN-15662	50-pk.	26213	
2mL Micro-Centrifuge Tubes for dSPE (clean-up of 1mL extract)					
Resprep Q210	150mg MgSO ₄ , 25mg PSA	Mini-Multiresidue, European prEN-15662	100-pk.	26215	
Resprep Q211	150mg MgSO ₄ , 25mg PSA, 25mg C18	Mini-Multiresidue	100-pk.	26216	
Resprep Q213	150mg MgSO ₄ , 25mg PSA, 7.5mg GCB	Mini-Multiresidue, European prEN-15662	100-pk.	26218	

PSA—primary and secondary amine exchange material; GCB—graphitized carbon black

FREE
Sample Packs
Available!

Visit www.restek.com/quenchers for a complete QuEChERS product listing and view our audio slideshow on using QuEChERS.

Extraction Cells for ASE[®] 200



Buy 5 cells or cap pairs & get the 6th one free!

- Meets original equipment manufacturer's performance.
- Choose original equipment-equivalent stainless steel, or Siltek[®] deactivation for improved inertness and extended lifetime. (Discount applies to stainless steel only.)

Save now until June 30, 2009 on these popular sizes:

Description	qty.	Stainless Steel		
		cat.#	list price	sale price
Extraction Cell Body for ASE 200, 22mL	six for the price of 5	26098-600	\$522	
Extraction Cell Body for ASE 200, 33mL	six for the price of 5	26116-600	\$522	
Replacement Extraction Cell End Caps for ASE 200	six 2-pks. for the price of 5	26096-600	\$1830	

Mass. EPH Tubes

- Superior fractionation of extractable petroleum hydrocarbons.
- Easier quantification; lower background & less interference.
- Reliable, accurate, and reproducible results.
- Unique packaging designed for convenience and storage stability.

Massachusetts EPH Tubes

20mL, 5g

qty.	cat.#	price
20-pk.	26065	

Get More!

Request Application Note
Advantage 2007.03, pg14-15
lit. cat# 580135.





melamine?

Easily detect 1µg/g melamine with
our complete kit for GC/MS

NEW!

Melamine Analysis Standards

Available in 1mL/ampul (1,000µg/mL)

Melamine Stock Standard - cat.# 33247

Cyanuric Acid Stock Standard - cat.# 33248

Ammelide Stock Standard - cat.# 33249

Ammeline Stock Standard - cat.# 33250

Benzoguanamine Internal Std - cat.# 33251

Melamine Mix Standard - cat.# 33253

Full GC/MS
method kit
available with
instructions!

Keep up with advances in melamine analysis at www.restek.com/melamine

USP Residual Solvents Standards

We've got them on hand and ready to ship within 24 hours.

USP-Equivalent Standards

to Achieve USP <467> Compliance

New Lower
Prices!

Residual Solvents - Class 1

(5 components)

In dimethyl sulfoxide, 1mL/ampul

cat. # 36279 (equivalent to USP#1601102) (ea.)

Residual Solvents Class 2 - Mix B

(8 components)

In dimethyl sulfoxide, 1mL/ampul

cat. # 36280 (equivalent to USP#1601292) (ea.)

Residual Solvents Class 2 - Mix A

(15 components)

In dimethyl sulfoxide, 1mL/ampul

cat. # 36271 (equivalent to USP#1601281) (ea.)

Residual Solvents Class 2 - Mix C

(8 components)

In dimethyl sulfoxide, 1mL/ampul

cat. # 36273 (equivalent to USP#1601306) (ea.)

quantity discounts

Order 3 or 4 of any one analytical reference material product and receive a 10% discount!

Order 5 or more of any one analytical reference material product and receive a 20% discount!

In
Stock
Now!

Get more on **RESIDUAL SOLVENTS** at www.restek.com/ovi



Analytical Reference Materials



Get more
BANG
for your
buck.



Explosives Reference Materials Special Offer

Stock up now and save on hazmat fees.

Buy 2 get 1 FREE!

- Now available and ready to ship.
- Meet all DOT requirements.
- Value priced 3-pks. save you money on hazmat fees.

Reference materials for:

- **EPA Method 8095** (Explosives by GC)
- **EPA Method 8330** (Nitroaromatics and Nitramines by HPLC)

Offer valid through July 31, 2009

For more information visit www.restek.com/bang

Assure LC/MS/MS System Suitability with our Unique Forensic Drug Screen Test Mixture

Standards for exempted drugs of abuse available:

- Benzodiazepines
- Cocaine & Metabolites
- Methadone & Metabolites
- Amphetamines & Metabolites
- Opiates & Metabolites
- Cannabinoid & Metabolites
- Barbiturates
- GHB
- LSD
- and others

**Increase sample throughput and data quality with
easy, reliable verification of LC/MS/MS performance.**

Forensic Drug Screen Test Mixture

amiodarone	10µg/mL	diazepam	10
amphetamine	10	doxepine	10
caffeine	10	haloperidol	1
codeine	10	morphine	10

In P&T methanol, 1mL/ampul

cat. # 36340 (ea.)

Forensic Drug Screen Internal Standard

D5-diazepam D5-doxepine

10µg/mL each in P&T methanol, 10mL/ampul

cat. # 36341 (ea.)

Get More!

For more information on our LC/MS/MS system suitability
test mix for drug analysis, request lit. cat# CFTS1002.

In addition to these, see our extensive selection of
NIST-traceable Blood Alcohol Standards at www.restek.com



TO-Clean Canister Cleaning System

Introductory Offer - Save \$500

High capacity, fully automated, easy to use canister cleaning oven dramatically increases lab efficiency!

- Twelve 6L canister capacity; Custom-built trays for different canister sizes.
- Method TO-14A/15 compliant.
- Small footprint saves lab space.
- No computer needed—uses embedded touch screen controller.
- Save up to ten user defined methods.
- Automated system leak test.
- Isothermal oven cleans entire can AND valve more completely than band heaters.
- Includes Edwards RV-8 vacuum pump—no turbo pumps!
- One year limited warranty.

Save Now!



Dimensions:
52"H x 35"W x 56"L
Weight: 525 lbs

Description	qty.	cat.#	list price	sale price
TO-Clean Oven, 120V, 60Hz	ea.	22916-406		
TO-Clean Oven, 220/230V, 50/60Hz	ea.	22917-406		
Optional Accessories	qty.	cat.#	list price	
Dewar, glass, 4300mL stainless steel u-tube trap	ea.	22918		
Oven Cart, 48" x 30", 12 gauge steel, push handle and casters	ea.	22919		

Note: Ovens are built on demand, therefore, a ten week lead time is required on all orders. A limited return policy applies to TO-Clean ovens. Special pricing offer ends December 31, 2009. Discount cannot be combined with any other offers. Dewar and cart not included in offer. Domestic orders only.

	Restek	Entech
Capacity	12-6L cans	6-6L cans
Software	Included	Separate

Fill Tedlar® Bags without Pump Contamination with Vacuum Bag Sampler

Buy sampler & Get pack of 10 bags FREE!

- Cost-effective alternative for whole air sampling.
- Light weight and easy to use.
- Vacuum sampler fills bag quickly, without sample passing through pump.
- Large selection of Tedlar® bag sizes available, as well as stainless steel valve option.

Description	qty.	cat.#	list price	sale price
Bag Sampler/Tedlar Bag				
Includes Vacuum Bag Sampler Model 1062 and 10pk 1L Tedlar Bags w/PP valve (22118 + 22050)	kit	22118-406.1		
Bag Sampler/Tedlar Bag				
Includes Vacuum Bag Sampler Model 1062 and 10pk 10L Tedlar Bags w/PP valve (22118 + 22053)	kit	22118-406.2		



Save Now!

Offer valid through June 30, 2009.



RESOLUTION EVOLUTION



REDUCE ACETONITRILE USE WITH A RESTEK BIPHENYL COLUMN

The first choice when developing
methods using alternative solvents.

- Higher retention in methanol than C18 or other phenyl columns.
- Excellent aromatic selectivity.
- Available in solvent-reducing UHPLC format.

Find more acetonitrile solutions at
www.restek.com/acetonitrile

The Choice Is Yours

Pinnacle® DB 1.9µm columns offer the widest
variety of stationary phases for UHPLC

Aqueous C18 PFP Propyl Biphenyl Cyano Silica C18 IBD C8 X3 PAH



www.restek.com/uhplc



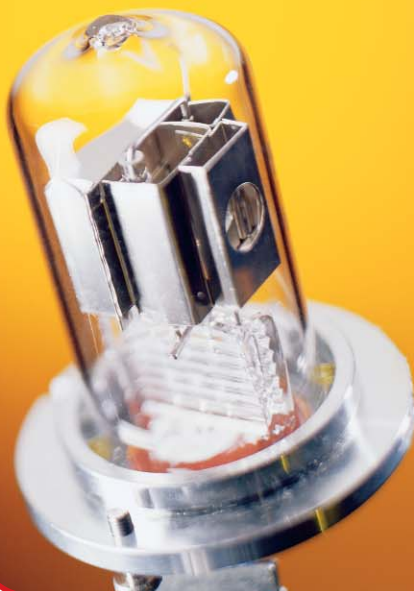
Don't burn up your budget!

Save now on selected **Detector Lamps**.

Save 10%
when you buy 1.

Save 15%
when you buy a 2-pk.

Save 20%
when you buy a 3-pk.



Description	Manufacturer's Price	Similar to part #	qty.	cat.#	sale price	price/lamp
For Agilent HPLC Systems						
Detector Lamp, 1090 DA, 1050			1-pk.	25260-712.10		
VW/DA/MWD, for Agilent	\$589/ea.	79883-60002	2-pk.	25260-712.15		
Model #s 1090, 1050			3-pk.	25260-712.20		
Lamp, VWD G1314A, for Agilent	\$579/ea.	G1314-60100	1-pk.	25262-712.10		
Model #s 1100, 1200			2-pk.	25262-712.15		
			3-pk.	25262-712.20		
8453 Deuterium Lamp, for Agilent	\$632/ea.	2140-0605	1-pk.	25263-712.10		
Model # 8453			2-pk.	25263-712.15		
			3-pk.	25263-712.20		
Lamp, DAD Long Life Deuterium (2000 hours), for Agilent	\$928/ea.	5181-1530	1-pk.	25399-712.10		
Model #s 1100			2-pk.	25399-712.15		
			3-pk.	25399-712.20		
For Shimadzu HPLC Systems						
Deuterium Lamp, for Shimadzu	\$704/ea.	228-34016-02	1-pk.	25284-712.10		
Model #s SPD-10A, 10AV, M20A			2-pk.	25284-712.15		
			3-pk.	25284-712.20		

Offer ends **September 30, 2009**. Discount cannot be combined with any other offers. Domestic orders only.

Mobile Phase Degasser

In-line vacuum degassing

- Prevents oxygen from causing flow rate instability and baseline noise.
- Prevents bubbles from forming in check valves, at connections, or in detector flow cells.
- More effective than sonication or helium sparging.

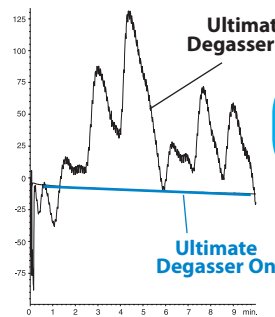
Specifications:

Residual Oxygen¹	0.9ppm	Wetted Parts	Teflon AF, PTFE, ETFE, PPS
Pressure Loss¹	0.24psi (1.65kPa)	Max Flow Rate	7mL/min./channel
Internal Volume	500µL		

¹At a flow rate of 1mL/min.

Description	qty.	cat.#	price
110V Mobile Phase Degasser (4 Channel, 7mL/min./channel)	ea.	25189	
220V Mobile Phase Degasser (4 Channel, 7mL/min./channel)	ea.	25194	

To prevent system damage, do not use the Degasys system with solutions containing TFA at concentrations greater than 5%.



The Ultimate Degasser provides highly stable baselines

Mobile Phase: water:methanol
50:50
Flow: 1.0mL/min.
Det.: UV @ 210nm

ASI Piston Seals for Agilent HPLC

Piston seals wear out over time and Restek is your best option for economical replacements. Our piston seals are constructed of Teflon® material with an additive that reduces their tendency to "cold flow", while improving wear characteristics and resistance to HPLC solvents.



Description	qty.	cat.#	price
ASI Piston Seal	ea.	25175	
ASI Piston Seal	10-pk.	25176	

HPLC Piston Seal Insertion Tool

Simplify your pump maintenance: use one end to remove your old seal, then slip your new seal on the other end and push it flush into position. The tool will not mar the surrounding metal surface of the pump housing.



Remove a seal



Seat a seal



Description	qty.	cat.#	price
HPLC Piston Seal Insertion Tool	ea.	21356	

PATENTS & TRADEMARKS

Restek patents and trademarks are the property of Restek Corporation. Other trademarks appearing in Restek literature or on its website are the property of their respective owners.

Secure-Fit Fittings



A good connection between HPLC components is imperative for trouble-free chromatography. Secure-Fit connectors ensure a consistent, leak-free seal—and eliminate excess dead volume! Finger-tighten fittings are available in stainless steel and PEEK™.

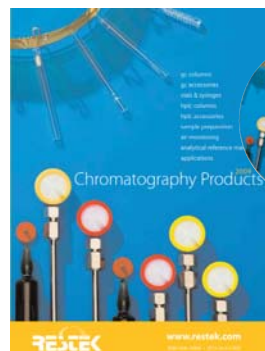
Secure-Fit Fittings—Single Connectors

Length	Stainless Steel			PEEK			price
	0.005" ID	0.007" ID	0.010" ID	0.005" ID	0.007" ID	0.010" ID	
6cm	25181	25185	25190	25230	25234	25217	
10cm	25182	25186	25191	25231	25235	25218	
20cm	25183	25187	25192	25232	25236	25219	
30cm	25184	25188	25193	25233	25237	25220	
50cm	26510	26511	26512	—	—	—	

Secure-Fit Fittings—Two Connectors

Length	Stainless Steel			PEEK			price
	0.005" ID	0.007" ID	0.010" ID	0.005" ID	0.007" ID	0.010" ID	
10cm	25208	25211	25214	25221	25224	25227	
20cm	25209	25212	25215	25222	25225	25228	
30cm	25210	25213	25216	25223	25226	25229	
50cm	26513	26514	26515	—	—	—	

2009/2010 CATALOG



Request your
FREE
Restek Product
Catalog!

www.restek.com/catalog

Lab Gas Issues?

ENSURE QUALITY AND MAINTAIN PRODUCTION
WITH A RESTEK SOLUTION



Save \$500 now on
selected generators!

HYDROGEN



FID



ZERO AIR



NITROGEN



*\$500 off good on all Restek stock generators, excluding cat.# 20684
(1000cc/min. Zero Air) and cat.# 20680 (3500cc/min. Zero Air).

www.restek.com/gas



Lit. Cat.# GNES1146
2009 v.3

© 2009 Restek Corporation.



Save
25%
on Rxi®-5Sil MS
Columns

Rxi®-5Sil MS

**Exceptionally Inert Columns
for GC/MS and Trace Level Analyses**

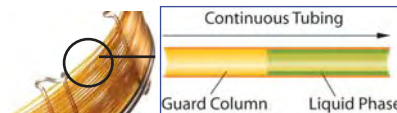
- **Low bleed** at high temperatures, for higher sensitivity and lower detection limits.
- **Excellent inertness** for acidic and basic compounds.
- Engineered to assure **column-to-column reproducibility**.

Rxi®-5Sil MS Columns (fused silica)

(Crossbound®, selectivity close to 5% diphenyl/95% dimethyl polysiloxane)

ID	df (µm)	temp. limits	length	cat. #	list price	sale price
0.18mm	0.18	-60 to 330/350°C	20-Meter	43602-R25		
0.18mm	0.36	-60 to 330/350°C	20-Meter	43604-R25		
0.25mm	0.25	-60 to 330/350°C	15-Meter	13620-R25		
0.25mm	0.25	-60 to 330/350°C	30-Meter	13623-R25		
0.25mm	0.25	-60 to 330/350°C	60-Meter	13626-R25		
0.25mm	0.50	-60 to 330/350°C	30-Meter	13638-R25		
0.32mm	0.25	-60 to 330/350°C	30-Meter	13624-R25		
0.32mm	0.50	-60 to 330/350°C	30-Meter	13639-R25		

Rxi®-5Sil MS with Integra-Guard™ Protection without the Connection



15m, 0.25mm ID, 0.25µm Rxi-5Sil MS w/10m Integra-Guard Column	13620-127R25
30m, 0.25mm ID, 0.25µm Rxi-5Sil MS w/5m Integra-Guard Column	13623-124R25
30m, 0.25mm ID, 0.25µm Rxi-5Sil MS w/10m Integra-Guard Column	13623-127R25
30m, 0.25mm ID, 0.50µm Rxi-5Sil MS w/10m Integra-Guard Column	13638-127R25

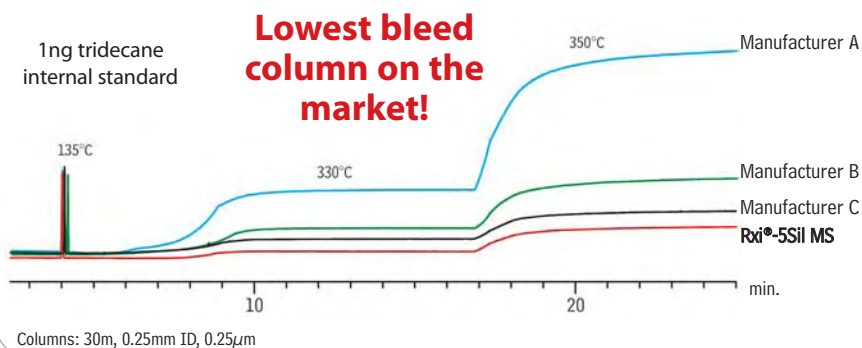
Offer valid through June 30, 2009.

Visit www.restek.com/rxi
for a complete listing
of Restek's **26**
Rxi®-5Sil MS Columns!

PATENTS & TRADEMARKS

Restek patents and trademarks are the property of Restek Corporation. Other trademarks appearing in Restek literature or on its website are the property of their respective owners.

New Rxi®-5Sil MS columns outperform competitors, producing lower bleed at 300°C and 350°C than any other column on the market.



melamine?

NEW!

Easily detect 1 µg/g melamine with our complete kit for GC/MS

Melamine Analysis Kitcat. # 33254 (kit)

Kit includes:

COLUMN:

Rxi-5Sil MS with 5 meter Integra Guard™

STANDARDS:

1mL Melamine Stock Standard (1,000 µg/mL)
 1mL Cyanuric Acid Stock Standard (1,000 µg/mL)
 1mL Ammelide Stock Standard (1,000 µg/mL)
 1mL Ammeline Stock Standard (1,000 µg/mL)
 1mL Benzoguanamine Internal Std (1,000 µg/mL)
 1mL Melamine Mix Standard (1,000 µg/mL)

DERIVATIZATION

REAGENT:

25g BSTFA w/ 1% TMCS

ACCESSORIES:

50mL centrifuge tubes, 5-pk.
 13mm, 0.45 µm nylon syringe filters, 5-pk.

EASY-TO-FOLLOW INSTRUCTIONS with procedural check list to simplify laboratory documentation!

Save
10%
 when you
 buy as a kit

Keep up with advances in Melamine analysis at www.restek.com/melamine

NEW!

Brominated Flame Retardants Analysis

Rtx®-1614 Columns (5% phenyl methyl)

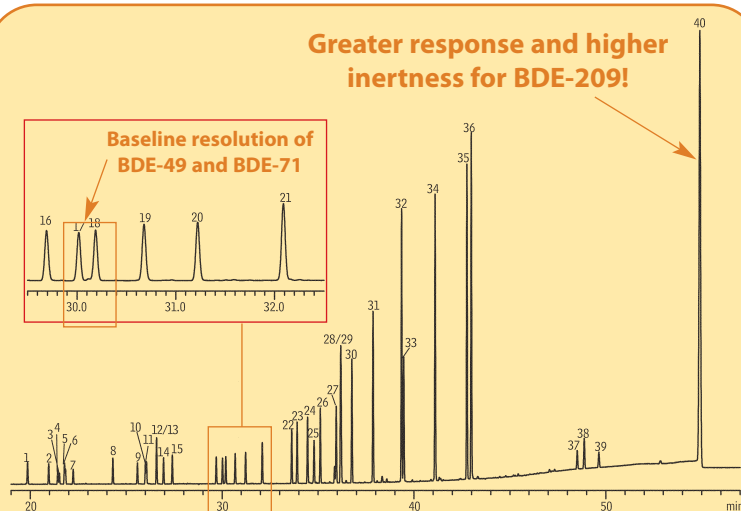
- Optimized for PBDE analysis by EPA Method 1614.
- Unique deactivation gives higher BDE-209 response, compared to DB-5HT columns, for greater analytical sensitivity.
- Exceeds EPA Method 1614 resolution criteria for BDE-49 and BDE-71.

Rtx®-1614 Columns (fused silica)

(5% phenyl methyl)

ID	df (µm)	temp. limits	length	cat. #	price
0.25mm	0.10	-60 to 330/360°C	15-Meter	10296	
0.25mm	0.10	-60 to 330/360°C	30-Meter	10295	

Greater response and higher inertness for BDE-209!



Column: Rtx®-1614, 30m, 0.25mm ID, 0.10 µm (cat. # 10295)
 For analytical conditions, visit www.restek.com and search for GC_EV01019

CHROMATOGRAPHY PRODUCTS . . . gc, hplc & fluid transfer

HRMAlytic Australian Distributors

ECHnology Pty Ltd

www.chromtech.net.au E-mail jimjeffs@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169



Improve your Refinery Gas Analyses

Rt®-Alumina BOND Columns

- Reduce detector noise through less particle generation.
- More accurate results through symmetrical peaks.
- Reproducible retention times and flow behavior from column-to-column.

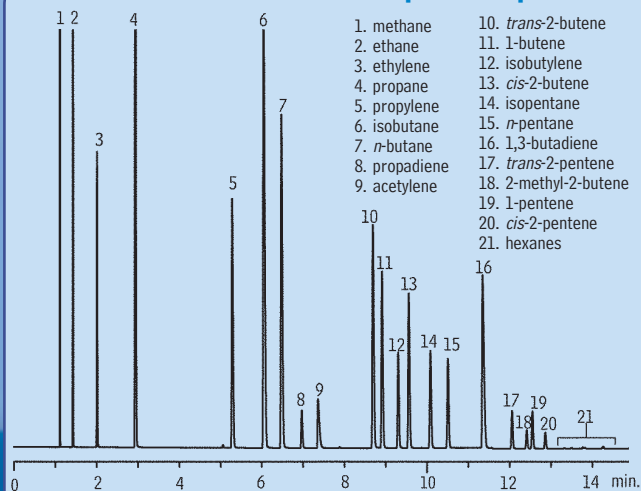
Rt®-Alumina BOND Columns (fused silica PLOT)
(Na₂SO₄ deactivation)

ID	df (μm)	temp. limits	length	cat. #	price
0.32mm	5	to 200°C	30-Meter	19757	
0.32mm	5	to 200°C	50-Meter	19758	
0.53mm	10	to 200°C	30-Meter	19755	
0.53mm	10	to 200°C	50-Meter	19756	

For Refinery Gas
Standards, visit
www.restek.com/air



Excellent resolution and peak shape!



Column: Rt®-Alumina BOND, 50m, 0.53mm ID, 10μm (cat.# 19756); Sample: refinery gas
For analytical conditions, visit www.restek.com and search for GC_PC01085

Analyze ppb Levels of Sulfur Gases in Hydrocarbon Streams Without Interference

Rt®-XLSulfur Packed & Micropacked Columns

- Optimized columns for low ppb sulfur analysis.
- Eliminate the need for Teflon® tubing.
- Column and end-fittings are Siltek® treated for maximum inertness.

Rt®-XLSulfur Packed Columns

Purchase installation kit separately.

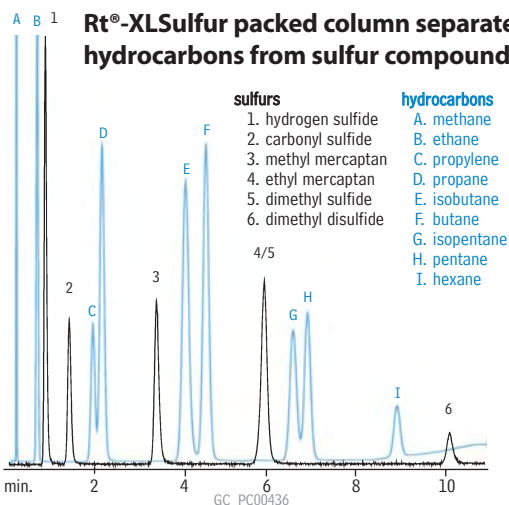
OD	ID	1-Meter	2-Meter
1/8"	2.0mm	80484-	80485-
3/16"	3.1mm	80482-	80483-

Rt®-XLSulfur Micropacked Columns

Purchase installation kit separately.

OD	ID	1-Meter	2-Meter
1/16"	1.0mm	19804	19805
0.95mm	0.75mm	19806	19807

Rt®-XLSulfur packed column separates hydrocarbons from sulfur compounds.



Column: Rt®-XLSulfur micropacked column, 1m, 0.75mm ID (cat.# 19806)
For analytical conditions, visit www.restek.com and search for GC_PC00436

for more information on packed columns and installation kits, visit www.restek.com



Super-Clean Gas Filter and Base Plate Kit

FREE Base Plate
with purchase of 2 triple filters

Save
\$200

- Save over \$200, exclusively from Restek!
- High Purity output ensures 99.9999% pure gas (at max. flow of 2L/min.)
- Quick connect fittings for easy, leak-tight filter changes.
- Base plate includes 1/8" brass fittings.

Description	qty.	cat.#	price
Restek Exclusive Triple Filter Kit: includes 2 triple filters & free base plate	kit	22859-409	

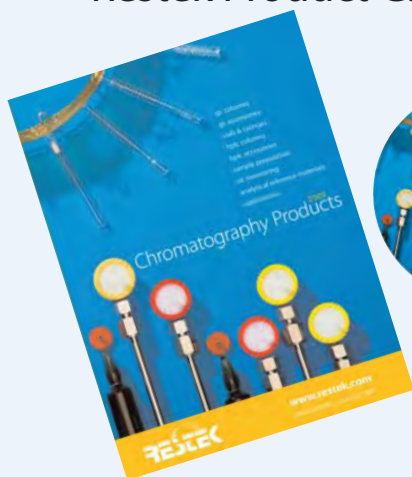
Offer valid through Dec. 31, 2009.
Cannot be combined with other offers or discounts.



For complete listing of our Super-Clean Gas Filters and Base plates, visit www.restek.com

BENCHTOP OR LAPTOP?

Request your FREE 2009
Restek Product Catalog!



www.restek.com/catalog

Restek Electronic Leak Detector

NEW!

Protect your data and analytical column!

High temperature methods are extremely sensitive to carrier gas impurities such as water and oxygen. Make sure you have clean carrier gas and frequently check connections and injection system fittings for leaks using an electronic leak detector.

Leak Detector with
Universal Charger Set
(US, UK, European, Australian)
Cat.# 22839










www.restek.com/leakdetector



Inlet Liners

for Agilent GCs

COLUMN INSTALLS THIS END

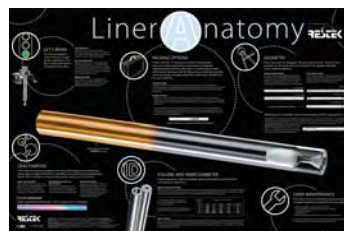
Splitless Liners for Agilent GCs	Benefits/Uses	ID* OD x Length	Similar to Agilent part #	ea.	cat.#/price 5-pk.	25-pk.
 Gooseneck Splitless (4mm)†	trace samples >2µL	4.0mm 6.5mm x 78.5mm	5181-3316 (ea.) 5183-4695 (5-pk.) 5183-4696 (25-pk.)	20798	20799	20800
 Gooseneck Splitless (4mm) w/Wool†	trace samples >2µL	4.0mm 6.5mm x 78.5mm	5062-3587 (ea.) 5183-4693 (5-pk.) 5183-4694 (25-pk.)	22405	22406	22407
Split Liners for Agilent GCs	Benefits/Uses	ID* OD x Length	Similar to Agilent part#	ea.	cat.#/price 5-pk.	25-pk.
 4mm Split w/Wool	universal, use with Agilent 7673 autosampler	4.0mm 6.3mm x 78.5mm	19251-60540 (ea.) 5183-4691 (5-pk.) 5183-4692 (25-pk.)	20781	20782	20783
 Cup Splitter	high & low MW compounds	4.0mm 6.3mm x 78.5mm	18740-80190 (ea.) 5183-4699 (5-pk.)	20709	20710	—
Split/Splitless Liners for Agilent GCs	Benefits/Uses	ID* OD x Length	Similar to Agilent part #	ea.	cat.#/price 5-pk.	25-pk.
 Low Pressure Drop Liner w/Wool	universal	4.0mm 6.3mm x 78.5mm	—	21032	21033	—
DI Liners for Agilent GCs** (For 0.25/0.32/0.53mm ID Columns)	Benefits/Uses	ID* OD x Length		ea.	cat.#/price 5-pk.	25-pk.
 Drilled Uniliner (hole near top)	trace, active samples, high recovery & linearity	4.0mm 6.3mm x 78.5mm		21054	21055	20998
 Drilled Uniliner (hole near bottom)	trace, active samples, high recovery & linearity	4.0mm 6.3mm x 78.5mm		20756	20771	—

*Nominal ID at syringe needle expulsion point. **Use with two-hole ferrule for dual-column analysis. †Use this liner for increased sensitivity.

All liners are **100% deactivated** All liners are shipped intermediate polarity (IP) deactivated unless otherwise requested.

Don't see what you need?

Restek carries a complete line of instrument specific liners. Visit us online under GC Accessories to view our liners for **Agilent, Shimadzu, PerkinElmer, Thermo Scientific,** and **Varian** GCs.



FREE Poster!

Get your liner anatomy wall chart!
Call Restek at 800-356-1688 to request your free poster today!
lit. cat.# GNWC1014

EZ Twist Top™ Split/Splitless Injection Port for Agilent 7890 GCs



NEW!

Not available in
Germany or Japan.

- Change inlet liners faster, easier, and eliminate touching hot surfaces.
- Gas lines are attached to shell weldment bottom instead of the top.
- Gas lines don't interfere with routine maintenance.
- Weldment Removal Tool allows for removal of hot weldment without touching hot surfaces.
- Weldment stays secure in the tool for reattachment.
- Eliminates kinked or broken gas lines.
- Available for all Agilent GC models.

**No more
damaged
gas lines!**

Get the EZ Twist Top™ ADVANTAGE

	Restek EZ Twist Top™	Agilent Flip Top
Eliminate damaged gas lines	✓	
Siltek deactivation for enhanced inertness & durability	✓	
Avoid touching hot metal surfaces—Weldment tool included	✓	



**Designed
for drop in
installation!**

EZ Twist Top™ Split/Splitless Injection Port for Agilent 7890 GCs

Description	qty.	cat.#	price
Injection port assembly kit includes: shell weldment, 2 weldment O-rings, Siltek Dual Vespel Ring inlet seal, septum nut, reducing nut, stainless steel capillary nut and weldment tool	kit	22177	
Siltek injection port assembly kit includes: Siltek shell weldment, 2 weldment O-rings, Siltek Dual Vespel Ring inlet seal, septum nut, reducing nut, stainless steel capillary nut and weldment tool	kit	22178	

The EZ Twist Top™ and replacement parts are available for all Agilent Injection Ports.
For more information, visit www.restek.com and search for EZ Twist Top™

GC/MS Maintenance Essentials

Inland 45 Pump Oil

Recommended for most mass spectrometers.

- Ease at cold start.
- Low vapor pressure 10^{-7} torr.
- Nontoxic and noncorrosive.
- Compatible with buna-N, neoprene, and Viton® seals.
- Optimum vacuum pump performance.
- Lowest mass spectrometer background.
- Recommended for optimum mass spec performance.

NEW!



GC/MS Cleaning Kit

Poor sensitivity, loss of sensitivity at high masses, or high multiplier gain during an auto tune are all indicators that your mass spectrometer source may need to be cleaned. Our kit has all the components you need for cleaning and polishing your ion source.



NEW!

Description	Similar to Agilent part #	qty.	cat.#	price
Inland 45 Pump Oil	6040-0834	1 liter	24819	

Description	qty.	cat.#	price
Mass Spec Cleaning Kit with Dremel Tool	kit	27194	
Mass Spec Cleaning Kit without Dremel Tool	kit	27195	
Mass Spec Cleaning Kit Replacement Parts Kit (includes cloths, micro mesh sheets, small and large gloves)	kit	27196	



Ultra-High Purity (UHP) Gas Regulators

- **Most stable outlet pressure control.**
- **Secondary pressure regulation not needed.**

Inlet gauge: 0 to 4,000psig (0-27,579kPa)
 Outlet assembly: diaphragm valve, 1/4" tube fitting
 Outlet Pressure: 0 to 100psig (0-689kPa)
 Outlet Gauge: 30" – 0 to 200psig (0-1379kPa)



Dual-Stage Ultra-High Purity Chrome-Plated Brass Gas Regulators

Fitting	qty.	cat.#	price
CGA 580 (N ₂ , He, Ar)	ea.	21667	
CGA 350 (H ₂ , P ₂)	ea.	21668	
CGA 590 (Air)	ea.	21669	

Single-Stage Ultra-High Purity Chrome-Plated Brass Gas Regulators

Fitting	qty.	cat.#	price
CGA 580 (N ₂ , He, Ar)	ea.	20646	
CGA 350 (H ₂ , P ₂)	ea.	20647	
CGA 590 (Air)	ea.	20648	

Compare
& **SAVE!**

Dual-Stage Ultra-High Purity Stainless Steel Gas Regulators

Fitting	qty.	cat.#	price
CGA 580 (N ₂ , He, Ar)	ea.	20662	
CGA 350 (H ₂ , P ₂)	ea.	20663	
CGA 590 (Air)	ea.	20664	

Single-Stage Ultra-High Purity Stainless Steel Gas Regulators

Fitting	qty.	cat.#	price
CGA 580 (N ₂ , He, Ar)	ea.	20665	
CGA 350 (H ₂ , P ₂)	ea.	20666	
CGA 590 (Air)	ea.	20667	

Visit www.restek.com
 for more information
 on Gas Regulators

NEW!



Cylinder Holders, Wall Mounted

Description	qty.	cat.#	price
Single Cylinder Holder, Wall Mounted	ea.	21333	
Double Cylinder Holder, Wall Mounted	ea.	23400	
Triple Cylinder Holder, Wall Mounted	ea.	23401	
Four Cylinder Holder, Wall Mounted	ea.	23402	

NEW!

Swagelok® Stainless Steel & Brass Fitting kits

Description	qty.	cat.#	price
Swagelok Brass Fitting Kit	kit	23141	

Description	qty.	cat.#	price
Swagelok Stainless Steel Fitting Kit	kit	23197	

**Savings by
40% purchasing kits!**



Swagelok® Brass Fittings Kit

Restek now carries a complete line of Swagelok® fittings!
For more information visit us at www.restek.com



Sample Preparation

Parts for ASE® 200 Systems

ASE® 200 Extraction Cells

- Meets original equipment manufacturer's performance.
- Choose original equipment-equivalent stainless steel, or Siltek® deactivation for improved inertness and extended lifetime. (Discount applies to stainless steel only.)



Buy 5 cells or cap pairs & get the 6th one free!

6 for the price of 5!

Save now until June 30, 2009 on these popular sizes:

Description	qty.	Stainless Steel		
		cat.#	list price	sale price
Extraction Cell Body for ASE 200, 22mL	six for the price of 5	26098-600		
Extraction Cell Body for ASE 200, 33mL	six for the price of 5	26116-600		
Replacement Extraction Cell End Caps for ASE 200	six 2-pks. for the price of 5	26096-600		

Valves

for ASE® 100/200/300 Systems



NEW!

Description	qty.	cat.#	price
Pressure Relief Valve for ASE 100/200/300 Systems	ea.	26159	
Static Valve for ASE 100/200/300 Systems	ea.	26160	

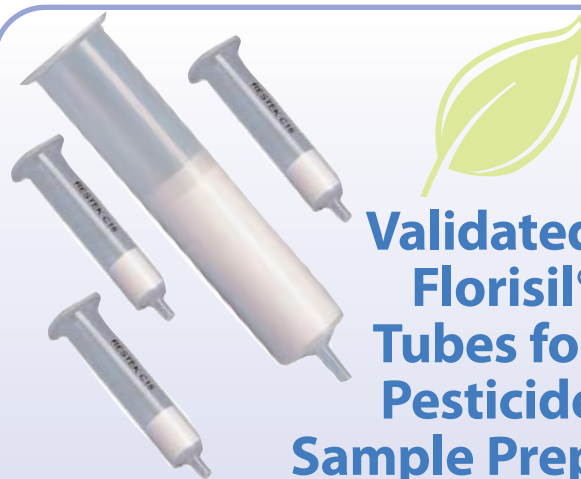
Autoseal Tip Assembly

for ASE® 200 Systems



NEW!

Description	Stainless Steel			Siltek Treated		
	qty.	cat.#	price	qty.	cat.#	price
Autoseal Tip Assembly for ASE 200 Systems	ea.	26162		ea.	26161	



Validated Florisil® Tubes for Pesticide Sample Prep

- Tested for pesticide recovery and TCP break-through per EPA SW-846, Method 3620C.
- For large volumes, use 2g tube for greater savings and efficiency than two 1g tubes in series.

Florisil (EPA SW 846 methods and CLP protocols)

3mL/500mg (50-pk.)	6mL/1000mg (100-pk.)	15mL/2g (100-pk.)
24031	26205	26228

Teflon® frits and glass tubes also available.



Big Savings

with Restek Mini-Cans and sampling kits for vapor intrusion



- Smaller cans are less expensive to buy and cheaper to ship for analysis.
- Quick-Connect Fittings provide fast, easy can-to-kit connections in the field—no tools required!

Miniature Air Sampling Canisters with Quick-Connect Fitting

Description	qty.	400cc		1,000cc	
		cat.#	price	cat.#	price
Siltek Treated Miniature Canister with Siltek Treated Quick-Connect Stem Fitting	ea.	24190		24196	

Quick-Connect Fittings for Miniature Air Sampling Canisters

Description	qty.	cat.#	price
Quick-Connect Body Fitting	ea.	24187	

Note: Quick-connect body fitting (cat.# 24187) must be ordered separately to sample with quick-connect stem fitting.

Miniature Air Sampling Kits

NEW!

Canister Volume*/Sampling		Flow	Orifice	Siltek Treated
400cc	1 Liter	(sccm)	size	Sampling Kits
8 hour	24 hour	0.5–2	0.0008"	26253
1 hour	2 hour	4–8	0.0016"	26257

*Additional orifice sizes available.



get mini!

For more information on Restek's Mini-Cans and sampling kits, visit www.restek.com/air

Fill Tedlar Bags without Pump Contamination with Vacuum Bag Sampler

- Cost-effective alternative for whole air sampling.
- Light weight and easy to use.
- Vacuum sampler fills bag quickly, without sample passing through pump.
- Large selection of Tedlar bag sizes available, as well as stainless steel valve option.

Description	qty.	cat.#	list price	sale price
Bag Sampler/Tedlar Bag				
Includes Vacuum Bag Sampler Model 1062 and 10pk 1L Tedlar Bags w/PP valve (22118 + 22050)	kit	22118-406.1	\$1797	
Bag Sampler/Tedlar Bag				
Includes Vacuum Bag Sampler Model 1062 and 10pk 10L Tedlar Bags w/PP valve (22118 + 22053)	kit	22118-406.2	\$1901	

Buy sampler & Get pack of 10 bags FREE!

Save Now!



Offer valid through June 30, 2009.



Analytical Reference Materials



New mixes!

Ask about our updated
EPA 524.3 Supplemental Mixes



GET YOUR MIX

Time-Saving MegaMix® 
Environmental Reference Mixes.

- Largest number of target analytes in one mix, formulated for maximum stability.
- Available for US EPA methods 8260, 8270, 502.2, 524.2, 525.2, 624, 625, SOM01.1, OLC 03.2, OLM 04.2, Skinner List volatiles, Skinner List semivolatiles.

Save time, save effort, minimize potential for preparation problems—use MegaMix® reference mixes, only from Restek or authorized distributors.



www.restek.com/megamix

2nd Source TO-14A/TO-15 Gas Calibration Standards

- Standards from TWO manufacturers provides second source standards on one order.
- 12 month stability in transportable cylinders.
- Drop shipped for fast delivery and maximum shelf life.

TO-15 64 Component Mix (64 components)

1ppm in nitrogen, 104 liters @ 1,800psi
cat. # 34436 (ea.)

1ppm in nitrogen, 110 liters @ 1,800psi (Pi-marked Cylinder)
cat. # 34436-PI (ea.)

TO-14A 43 Component Mix (43 components)

1ppm in nitrogen, 104 liters @ 1,800psi
cat. # 34432 (ea.)

1ppm in nitrogen, 110 liters @ 1,800psi (Pi-marked Cylinder)
cat. # 34432-PI (ea.)

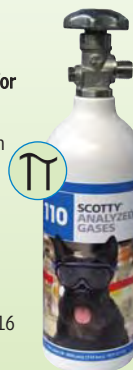
Spectra 104L Cylinders:

Aluminum construction
Size: 8 x 24 cm
Volume/Pressure:
104 liters of gas
@ 1,800psi
CGA-180
outlet fitting.
Weight:
1.5 lbs/0.7 kg



Scotty 110L Cylinders (Pi-marked Cylinders for EU Regulations):

Aluminum construction
Size: 8.3 x 29.5 cm
Volume/Pressure:
110 liters of gas
@ 1,800psi
CGA-180 outlet fitting.
Weight: 2.2 lbs/1 kg
US DOT Specs: 3AL2216



For more available gas standards visit www.restek.com/air



The Choice Is Yours

Pinnacle® DB 1.9µm columns offer the widest variety of stationary phases for UHPLC

Aqueous C18 PFP Propyl Biphenyl Cyano Silica C18 IBD C8 X3 PAH

www.restek.com/uhplc

USP-Equivalent Standards

to Achieve USP <467> Compliance

Residual Solvents - Class 1

benzene	10mg/mL	1,1-dichloroethene	40
carbon tetrachloride	20	1,1,1-trichloroethane	50
1,2-dichloroethane	25		

In dimethyl sulfoxide, 1mL/ampul

cat. # 36279 (equivalent to USP#1601102) (ea.)

Residual Solvents Class 2 - Mix A (15 components)

acetonitrile	2.05mg/mL	methylcyclohexane	5.90
chlorobenzene	1.80	methylene chloride	3.00
cyclohexane	19.40	tetrahydrofuran	3.45
cis-1,2-dichloroethene	4.70	toluene	4.45
trans-1,2-dichloroethene	4.70	m-xylene	6.51
1,4-dioxane	1.90	o-xylene	0.98
ethylbenzene	1.84	p-xylene	1.52
methanol	15.00		

In dimethyl sulfoxide, 1mL/ampul

cat. # 36271 (equivalent to USP#1601281) (ea.)

Residual Solvents Class 2 - Mix B (8 components)

chloroform	60µg/mL	nitromethane	50
1,2-dimethoxyethane	100	pyridine	200
n-hexane (C6)	290	tetralin	100
2-hexanone	50	trichloroethene	80

In dimethyl sulfoxide, 1mL/ampul

cat. # 36280 (equivalent to USP#1601292) (ea.)

Residual Solvents Class 2 - Mix C (8 components)

2-ethoxyethanol	800µg/mL	2-methoxyethanol	
ethylene glycol	3,100	(methyl cellosolve)	250
formamide	1,100	N-methylpyrrolidone	2,650
N,N-dimethylacetamide	5,450	sulfolane	800
N,N-dimethylformamide	4,400		

In dimethyl sulfoxide, 1mL/ampul

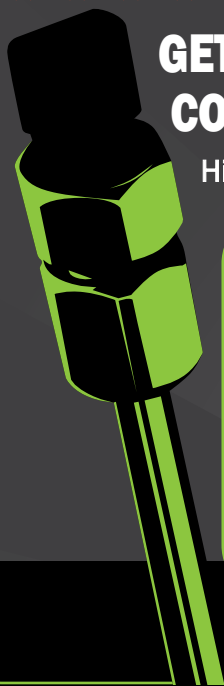
cat. # 36273 (equivalent to USP#1601306) (ea.)

In Stock Now!



Get more on **RESIDUAL SOLVENTS** at www.restek.com/ovi

RESOLUTION EVOLUTION



GET BETTER RESOLUTION OF YOUR TARGET COMPOUNDS WITH A RESTEK BIPHENYL COLUMN

Higher hydrophobic retention and aromatic selectivity in a single column.

SAVE

★ **\$50 TODAY** ★

on Biphenyl columns

AND GET A FREE

★ **HPLC ACCESSORIES KIT** ★

a \$185 value!

(Redemption details included with column.)

Visit www.restek.com/biphenyl and use the code below to take advantage of this offer!

Promo Code
1096D

Offer valid through April 30, 2009, or while supplies last.
Distributor participation may vary. Discount available on US orders only.

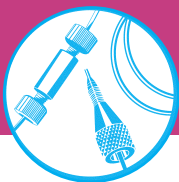
Visit www.restek.com/biphenyl

Protect your LC column with a Trident Guard



- Convenient and economical leak-free guard cartridge system, extremely easy to install.
- Versatile configuration protects against all levels of contamination.
- Integral design eliminates troublesome tubing connections.

visit www.restek.com/triguard for more information



Hub-Cap Accessories

Hub-Cap 4 Liter Bottle Tops

Quick, easy & reusable, Hub-Cap bottle tops keep your mobile phase lines in the reservoirs without using messy tape, film, or foil.

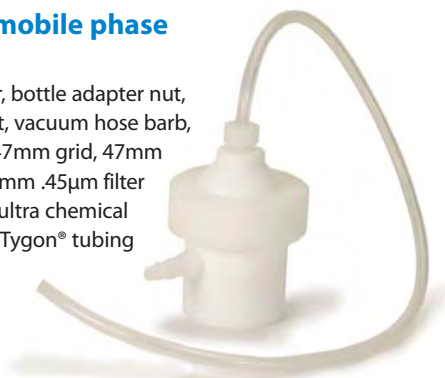


Description	qty.	cat.#	price
Hub-Cap (assembly of the bottle cap and plug)	kit	26541	
Hub-Cap Multi-pack	3-pk.	26542	

Hub-Cap Filter Kit

Transfer and filter mobile phase in a single step!

Kit includes: bottle adapter, bottle adapter nut, filter inlet cap, grid support, vacuum hose barb, tube compression fitting, 47mm grid, 47mm .22µm filter membrane, 47mm .45µm filter membrane, 1/4" OD x 1/8" ID ultra chemical resistant, Teflon® FEP lined Tygon® tubing (3'), 6" x 6" box with shrink wrap insert.



Description	qty.	cat.#	price
Hub-Cap Filter Kit	kit	26395	
Replacement Membrane Filters	qty.	cat.#	price
Polypropylene Membrane Filters, 47mm, 0.45µm	100-pk.	26396	
Polypropylene Membrane Filters, 47mm, 0.22µm	100-pk.	26397	
Nylon Membrane Filters, 47mm, 0.45µm	100-pk.	26398	
Nylon Membrane Filters, 47mm, 0.22µm	100-pk.	26399	

Economical Detector Lamps



Description	Model #	Similar to part #	qty.	cat.#	price
For Agilent HPLC Systems					
Detector Lamp, 1090 DA, 1050 VW/DA/MWD	1090, 1050	79883-60002	ea.	25260	
Lamp, DAD G1315A, G1365A	1100, 1200	2140-0590	ea.	25261	
Lamp, VWD G1314A	1100, 1200	G1314-60100	ea.	25262	
8453 Deuterium Lamp	—	2140-0605	ea.	25263	
G1321 Fluorescence Detector Flash Lamp	—	2140-0600	ea.	25264	
For Beckman HPLC Systems					
Deuterium Lamp	DU60, 62, 64, 65	596791	ea.	25454	
For Hitachi HPLC Systems					
Deuterium Lamp, Prealigned	L4000, L4200, L4250, L7400	AN0-0424	ea.	25465	
For PerkinElmer Instruments					
Deuterium Lamp	PE 200/785A	N2920149	ea.	25431	
For Shimadzu HPLC Systems					
Deuterium Lamp	SPD-6A	062-65056-02	ea.	25283	
Deuterium Lamp	SPD-10A, 10AV, M20A	228-34016-02	ea.	25284	
For Waters Detectors					
Xenon Lamp (w/o holder or mirror)	470	—	ea.	25404	
Xenon Lamp	474	—	ea.	25405	
Deuterium Lamp (UV/Vis)	484	80357	ea.	25406	
Deuterium Lamp	996, 2996	WAT052586	ea.	25408	
Deuterium Lamp	2487	WAS081142	ea.	25409	
Deuterium Lamp, long life (2,000 hours)*	486	80678	ea.	25410	

*Standard lamps have nominal 1,000-hour life.

Visit www.restek.com for a complete listing of Detector Lamps.

PEEK™ Survival Kit



The PEEK™ Survival Kit is an invaluable parts kit that contains tubing, fittings, and tools essential for setting up and maintaining your HPLC system: PEEK™ tubing, connectors, elbows, Teflon® tubing, a tubing cutter and extra blades, a ValvTool wrench, open-end wrenches, and more.

For start-up and maintenance in all HPLC systems.

Description	qty.	cat.#	price
PEEK Survival Kit for HPLC	kit	25322	

Contents:

Description	qty.	cat.#	price
PEEK Column Connector (beige, round body)	10-pk.	25015	
PEEK Tubing, 1/16" OD x 0.005" ID x 3m (red stripe)	ea.	25065	
PEEK Tubing, 1/16" OD x 0.007" ID x 3m (yellow stripe)	ea.	25066	
PEEK Tubing, 1/16" OD x 0.010" ID x 3m (blue stripe)	ea.	25067	
PEEK Tubing Elbow 90°	5-pk.	25308	
PEEK Tubing Elbow 180°	5-pk.	25309	
Teflon Tubing, 1/8" OD x 0.063" ID x 3m (1.6mm ID)	3m	25306	
Teflon Tubing, 1/8" OD x 0.094" ID x 3m (2.4mm ID)	3m	25307	
Tubing Clip	5-pk.	25310	
ValvTool Wrench	ea.	25321	
Open-End Wrenches (3/4" x 5/16")	2-pk.*	20110	
Clean-Cut Tubing Cutter	ea.	25069	
Replacement Blade for Clean-Cut Cutter	ea.	25070	
PEEK Union Connector 1/16"	2-pk.	25323	
Mobile Phase Sparge Filter: 2µm	ea.	25311	
Inlet Filter: 10µm	ea.	25312	

*Kit contains 1 wrench, replacement (cat.# 20110) is a 2-pk.

Mobile Phase Degasser

In-line vacuum degassing

- Prevents oxygen from causing flow rate instability and baseline noise.
- Prevents bubbles from forming in check valves, at connections, or in detector flow cells.
- More effective than sonication or helium sparging.

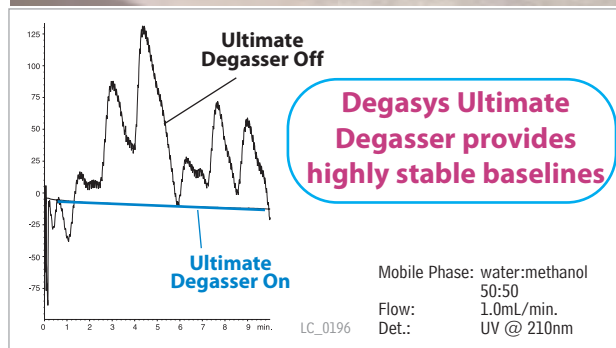
Specifications:

Residual Oxygen ¹	0.9ppm	Wetted Parts	Teflon AF, PTFE, ETFE, PPS
Pressure Loss ¹	0.24psi (1.65kPa)	Max Flow Rate	7mL/min./channel
Internal Volume	500µL		

¹At a flow rate of 1mL/min.

Description	qty.	cat.#	price
110V Mobile Phase Degasser (4 Channel, 7mL/min./channel)	ea.	25189	
220V Mobile Phase Degasser (4 Channel, 7mL/min./channel)	ea.	25194	

To prevent system damage, do not use the Degasys system with solutions containing TFA at concentrations greater than 5%.



Save a Life

(and your budget too!)

Extend the life of your existing instruments
instead of buying new equipment.



- Keep your LCs and GCs running smoothly **for years to come.**
- Equal or exceed the performance of the original components—
at a fraction of the cost!

Download a mini-catalog for your system today!

Genuine Restek Replacement Parts and Accessories for:

- HPLC Systems
- Agilent GCs
- PerkinElmer GCs
- Shimadzu GCs
- Thermo Scientific GCs
- Varian GCs



**Prevent
downtime
with routine
maintenance!**

Handy kits &
tools available
online!

www.restek.com/savealife



Lit. Cat.# GNES1131

© 2009 Restek Corporation.



Waste Overflow Indicator

Avoid messy pooling around mobile phase waste containers.



Hub-Cap 4 Liter Bottle Tops

Keep your mobile phase lines in the reservoirs without using messy tape, film, or foil.



Hub-Cap Filter Kit

Transfer and filter mobile phase in a single step!



Opti-Cap Bottle Top

Most economical way to helium-sparge and deliver HPLC mobile phases.

Rxi-5Sil MS Columns

Exceptionally Inert Columns for GC/MS and Trace Level Analyses

- **Low bleed** for lower detection limits.
- **Excellent inertness** for acidic and basic compounds.
- Engineered to assure **column-to-column reproducibility**.

NEW! **Ultra II** LC Columns

Universal application for Any LC System, providing scalability and unsurpassed selectivity on a wide range of particle sizes.

Sulfinert® Sample Cylinders & Valves



Mobile Phase Degasser

The ultimate degasser provides highly stable baselines.



GC/MS Cleaning Kit

Our kit has all the components you need for cleaning and polishing your ion source.



MS Vacuum Pump Oil

Recommended for optimum mass spec performance.



Improved design!

MSD Source Nut



Ultra-High Purity (UHP) Gas Regulators

Most stable outlet pressure control with no secondary pressure regulation needed.



Alumaseal Ferrules



Ultra-Clean Resin

Equivalent to XAD-2 Resin

Q-sep™
QuEChERS Products
 Quick, Easy, Cheap, Effective, Rugged, and Safe!
Tubes & Standards
 for pesticide residue analysis from food products



2nd Source TO-14A/TO-15 Gas Calibration Standards.

Now with Naphthalene!



Custom Coatings for Ultimate Inertness!

Siltek® Deactivation for Liners

Fast GC Analysis
 Analyze Chlorinated
 Pesticides in
7 Minutes!

Rtx-CLPesticides Column Kits



Download the latest *Essentials* Flyer

Our monthly circular featuring special offers on new and improved products. Learn what's new and get deals on LC and GC columns and accessories, analytical standards, sample prep supplies, air sampling products and more!

Download (1.76mb)