

GC capillary columns

VALCOBOND® AND VALCO PLOT®

from VICI Metronics

ValcoBond® and ValcoPLOT® capillary columns meet the highest quality standards for resolution, retention characteristics, inertness, bleed, and reproducibility.

ValcoBond® capillary columns

- Individually tested
- High temperature range
- Competitive pricing

We use proprietary liquid phase processing to produce low bleed characteristics while maintaining retention characteristics identical to the phases you are used to.

ValcoPLOT® capillary columns

- Widest polarity range
- Faster than micropacked
- Water tolerant

Reduce run time by replacing your packed columns with ValcoPLOT HayeSep capillary PLOT columns, with phases available only from VICI. Our proprietary phase processing produces the first capillary PLOT columns with characteristics identical to HayeSep packed columns.

VALCOBOND PHASES

pages 236-238

VB-FLUORO	Bonded fluorosilicone phase
VB-1	100% dimethylpolysiloxane
VB-5	(5%-Phenyl)-methylpolysiloxane
VB-35	(35%-Phenyl)-methylpolysiloxane
VB-50/608	(50%-Phenyl)-methylpolysiloxane
VB-624	(6% Cyanopropyl-phenyl)-methylpolysiloxane
VB-1701	(14% Cyanopropyl-phenyl)-methylpolysiloxane
VB-Wax	Polyethylene glycol (PEG)



VALCO PLOT PHASES

pages 240-244

ValcoPLOT Molesieve 5Å	ValcoPLOT A	High purity Divinylbenzene/ethyleneglycoldimethacrylate
ValcoPLOT Metal Molesieve 5Å	ValcoPLOT B	Divinylbenzene/polyethyleneimine
ValcoPLOT Alumina KCl	ValcoPLOT C	Divinylbenzene/acrylonitrile
ValcoPLOT Alumina Na₂So₄	ValcoPLOT D	High purity Divinylbenzene
	ValcoPLOT N	Divinylbenzene/ethyleneglycoldimethacrylate
	ValcoPLOT P	Divinylbenzene/styrene
	ValcoPLOT Q	Divinylbenzene
	ValcoPLOT R	Divinylbenzene/N-vinyl-2-pyrrolidinone
	ValcoPLOT S	Divinylbenzene/4-vinyl-pyridine

PRODUCTS FOR GC

Other useful products for gas chromatography include:

1/32" ultra low mass external unions . . .	p 19
FS adapter ferrules .	16-17
GC Detectors	221-223, 227
Injection valves	104-113
Stream selectors	124-135
Gas purifiers	246-247
Helium and nitrogen purifiers	226-227
Inlet discs (injector nuts for HP 6890 and 5890 . . .	18
Reduced breakdown injection port liners	245

TO ORDER

For prices or more information about your specific application, contact VICI Metronics:

Toll-free 877-737-1887
Tel 360-697-9199
Fax 360-697-6682

columns@vici.com



PRIMARY APPLICATIONS

Aldehydes
CFCs
Explosives
Ketones
PAHs
Silanes
Unsaturated compounds

VB-Fluoro Capillary Columns

- 100% bonded Fluorosilicone
- High thermal stability
- Unique selectivity

VB-Fluoro capillary columns feature unique selectivity created by high fluorine affinity to analyte lone pair electrons. This is coupled with thermal stability similar to low polarity phases such VB-1 and VB-5.

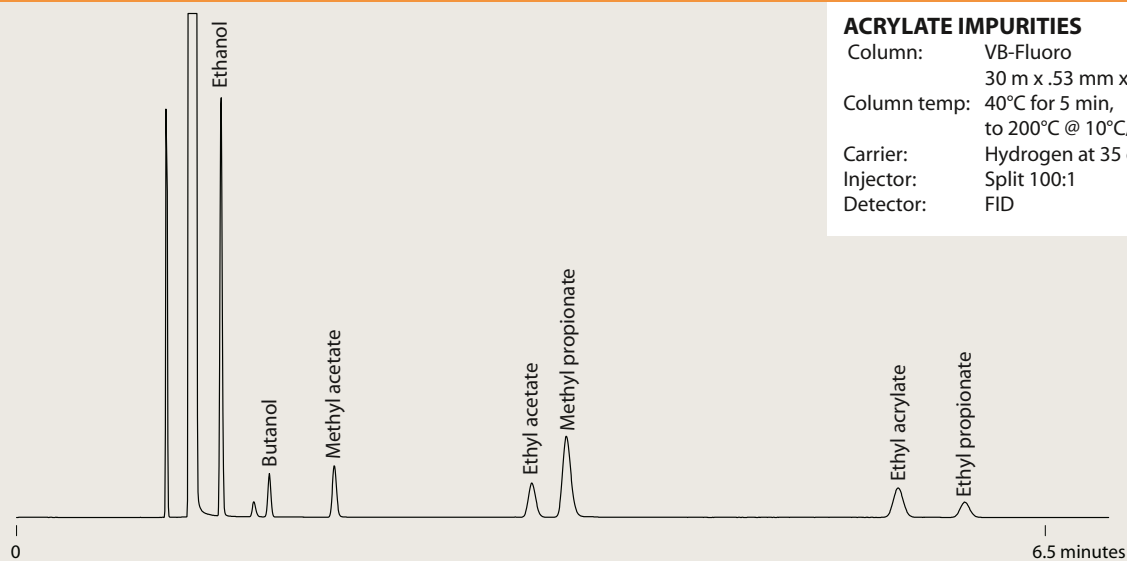
Low bleed characteristics make VB-Fluoro columns well suited for MS and ECD applications, and the high thermal stability allows their use as a complementary column for most high temperature applications which commonly utilize low polarity stationary phases.

Primary applications include ketones, aldehydes, explosives, PAHs, silanes, CFCs, and unsaturated compounds.

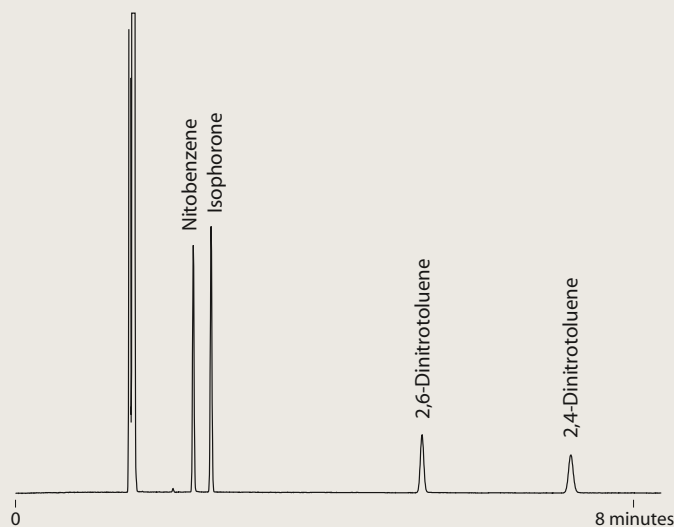
VB-Fluoro columns are a good replacement for Rtx-200, DB-200, DB-210, and VF-200 columns.

VB-Fluoro

0.25 mm ID	df	Prod No
30 meters	0.25	CFS-N03025-025
0.53 mm ID		
30 meters	1.00	CFS-N03053-100

VB-Fluoro**ACRYLATE IMPURITIES**

Column: VB-Fluoro
30 m x .53 mm x 1.00 μ m
Column temp: 40°C for 5 min,
to 200°C @ 10°C/min
Carrier: Hydrogen at 35 cm/sec
Injector: Split 100:1
Detector: FID

VB-Fluoro**EXPLOSIVES**

Column: VB-Fluoro
30 m x .53 mm x 1.00 μ m
Column temp: Isothermal 200°C
Carrier: Hydrogen at 35 cm/sec
Injector: Split 100:1
Detector: FID

GC CAPILLARY COLUMNS

VB-1

100% dimethylpolysiloxane

REPLACES

DB-1, DB-1ms, HP-1, HP-1MS, Ultra-1, Rtx-1, Rtx-1MS, SPB-1, MDN-1, BP-1, CP-Sil 5 CB, GB-1, 007-1, OV-1, SE-30, AT-1 and ZB-1

0.10 mm ID	<i>df</i>	<i>Prod No</i>
10 meters	0.10	CFS-A01010-010B
10 meters	0.20	CFS-A01010-020B
10 meters	0.40	CFS-A01010-040B
20 meters	0.10	CFS-A02010-010B
20 meters	0.20	CFS-A02010-020B
20 meters	0.40	CFS-A02010-040B
0.18 mm ID	<i>df</i>	<i>Prod No</i>
10 meters	0.10	CFS-A01018-010B
10 meters	0.18	CFS-A01018-018B
10 meters	0.40	CFS-A01018-040B
30 meters	0.10	CFS-A03018-010B
30 meters	0.18	CFS-A03018-018B
30 meters	0.40	CFS-A03018-040B
30 meters	1.00	CFS-A03018-100B
40 meters	0.18	CFS-A04018-018B
40 meters	0.40	CFS-A04018-040B
0.25 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.10	CFS-A01525-010B
15 meters	0.25	CFS-A01525-025B
15 meters	0.50	CFS-A01525-050B
15 meters	1.00	CFS-A01525-100B
15 meters	1.50	CFS-A01525-150B
30 meters	0.10	CFS-A03025-010B
30 meters	0.25	CFS-A03025-025B
30 meters	0.50	CFS-A03025-050B
30 meters	1.00	CFS-A03025-100B
30 meters	1.50	CFS-A03025-150B
60 meters	0.10	CFS-A06025-010B
60 meters	0.25	CFS-A06025-025B
60 meters	0.50	CFS-A06025-050B
60 meters	1.00	CFS-A06025-100B
60 meters	1.50	CFS-A06025-150B
0.32 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.10	CFS-A01532-010B
15 meters	0.25	CFS-A01532-025B
15 meters	0.32	CFS-A01532-032B
15 meters	0.50	CFS-A01532-050B
15 meters	1.00	CFS-A01532-100B

0.32 mm ID, cont'd	<i>df</i>	<i>Prod No</i>
15 meters	2.00	CFS-A01532-200B
15 meters	3.00	CFS-A01532-300B
15 meters	4.00	CFS-A01532-400B
15 meters	5.00	CFS-A01532-500B
30 meters	0.10	CFS-A03032-010B
30 meters	0.25	CFS-A03032-025B
30 meters	0.32	CFS-A03032-032B
30 meters	0.50	CFS-A03032-050B
30 meters	1.00	CFS-A03032-100B
30 meters	2.00	CFS-A03032-200B
30 meters	3.00	CFS-A03032-300B
30 meters	4.00	CFS-A03032-400B
30 meters	5.00	CFS-A03032-500B
60 meters	0.10	CFS-A06032-010B
60 meters	0.25	CFS-A06032-025B
60 meters	0.32	CFS-A06032-032B
60 meters	0.50	CFS-A06032-050B
60 meters	1.00	CFS-A06032-100B
60 meters	2.00	CFS-A06032-200B
60 meters	3.00	CFS-A06032-300B
60 meters	4.00	CFS-A06032-400B
60 meters	5.00	CFS-A06032-500B
0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.15	CFS-A01553-015B
15 meters	0.50	CFS-A01553-050B
15 meters	1.00	CFS-A01553-100B
15 meters	1.50	CFS-A01553-150B
15 meters	3.00	CFS-A01553-300B
15 meters	5.00	CFS-A01553-500B
30 meters	0.15	CFS-A03053-015B
30 meters	0.50	CFS-A03053-050B
30 meters	1.00	CFS-A03053-100B
30 meters	1.50	CFS-A03053-150B
30 meters	3.00	CFS-A03053-300B
30 meters	5.00	CFS-A03053-500B
60 meters	1.00	CFS-A06053-100B
60 meters	1.50	CFS-A06053-150B
60 meters	3.00	CFS-A06053-300B
60 meters	5.00	CFS-A06053-500B

PRIMARY APPLICATIONS

Amines
Flavors
Fragrances
Hydrocarbons
Pesticides
PCBs
Phenols
Sulfur compounds
EPA Methods
504, 551, 1618
NIOSH Methods
1300-1301,
1400-1403,
1450, 1501, 2005

VB-35

(35%Phenyl)-methylpolysiloxane

REPLACES

DB-35, AT-35, MDN-35, DB-35ms, Rtx-35, BP-35, HP-35, Rtx-35MS, 007-11, HP-35MS, Sup-Herb, ZB-35

0.25 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.25	CFS-C01525-025B
15 meters	0.50	CFS-C01525-050B
30 meters	0.25	CFS-C03025-025B
30 meters	0.50	CFS-C03025-050B
60 meters	0.25	CFS-C06025-025B
60 meters	0.50	CFS-C06025-050B
0.32 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.25	CFS-C01532-025B
15 meters	0.50	CFS-C01532-050B
30 meters	0.25	CFS-C03032-025B
30 meters	0.50	CFS-C03032-050B

0.32 mm ID, cont'd	<i>df</i>	<i>Prod No</i>
60 meters	0.25	CFS-C06032-025B
60 meters	0.50	CFS-C06032-050B
0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.50	CFS-C01553-050B
15 meters	1.00	CFS-C01553-100B
30 meters	0.50	CFS-C03053-050B
30 meters	1.00	CFS-C03053-100B
60 meters	0.50	CFS-C06053-050B
60 meters	1.00	CFS-C06053-100B

PRIMARY APPLICATIONS

Drugs
Pesticides
Herbicides
PAHs
Pharmaceuticals
PCBs
EPA Method 8081A
(organochlorine pesticides)

TO ORDER

Toll-free 877-737-1887
Tel360-697-9199
Fax360-697-6682

columns@vici.com

VB-5

(5% Phenyl)-methylpolysiloxane

PRIMARY APPLICATIONS

Drugs
Herbicides
Hydrocarbons
PCBs
Pesticides
Phenols
Semi-volatiles
Sulfur compounds

0.10 mm ID	df	Prod No
10 meters	0.10	CFS-B01010-010B
10 meters	0.20	CFS-B01010-020B
20 meters	0.10	CFS-B02010-010B
20 meters	0.20	CFS-B02010-020B
0.18 mm ID	df	Prod No
10 meters	0.18	CFS-B01018-018B
10 meters	0.40	CFS-B01018-040B
20 meters	0.18	CFS-B02018-018B
20 meters	0.40	CFS-B02018-040B
30 meters	0.18	CFS-B03018-018B
30 meters	0.40	CFS-B03018-040B
40 meters	0.18	CFS-B04018-018B
40 meters	0.40	CFS-B04018-040B
0.25 mm ID	df	Prod No
15 meters	0.10	CFS-B01525-010B
15 meters	0.25	CFS-B01525-025B
15 meters	0.50	CFS-B01525-050B
15 meters	1.00	CFS-B01525-100B
30 meters	0.10	CFS-B03025-010B
30 meters	0.25	CFS-B03025-025B
30 meters	0.50	CFS-B03025-050B
30 meters	1.00	CFS-B03025-100B
60 meters	0.10	CFS-B06025-010B
60 meters	0.25	CFS-B06025-025B
60 meters	0.50	CFS-B06025-050B
60 meters	1.00	CFS-B06025-100B
0.32 mm ID	df	Prod No
15 meters	0.10	CFS-B01532-010B
15 meters	0.25	CFS-B01532-025B
15 meters	0.50	CFS-B01532-050B
15 meters	1.00	CFS-B01532-100B
15 meters	2.00	CFS-B01532-200B
15 meters	3.00	CFS-B01532-300B
15 meters	5.00	CFS-B01532-500B

0.32 mm ID, cont'd	Prod No	
30 meters	0.10	CFS-B03032-010B
30 meters	0.25	CFS-B03032-025B
30 meters	0.50	CFS-B03032-050B
30 meters	1.00	CFS-B03032-100B
30 meters	2.00	CFS-B03032-200B
30 meters	3.00	CFS-B03032-300B
30 meters	5.00	CFS-B03032-500B
0.53 mm ID	df	Prod No
15 meters	0.50	CFS-B01553-050B
15 meters	1.00	CFS-B01553-100B
15 meters	1.50	CFS-B01553-150B
15 meters	2.00	CFS-B01553-200B
15 meters	2.65	CFS-B01553-265B
15 meters	3.00	CFS-B01553-300B
15 meters	5.00	CFS-B01553-500B
30 meters	0.50	CFS-B03053-050B
30 meters	1.00	CFS-B03053-100B
30 meters	1.50	CFS-B03053-150B
30 meters	2.65	CFS-B03053-265B
30 meters	3.00	CFS-B03053-300B
30 meters	5.00	CFS-B03053-500B
60 meters	1.00	CFS-B06053-100B
60 meters	1.50	CFS-B06053-150B
60 meters	2.00	CFS-B06053-200B
60 meters	2.65	CFS-B06053-265B
60 meters	3.00	CFS-B06053-300B
60 meters	5.00	CFS-B06053-500B

REPLACES

DB-5, DB-5ms,
HP-5, HP-5MS,
Ultra-5, Rtx-5, Rtx-
5MS, Rtx-5sil MS,
SPB-5, MDN-5,
BP-5, CP-Sil 8 CB,
GB-5, 007-5, OV-5,
SE-54, AT-5, and
ZB-5

VB-50/608

(50%Phenyl)-methylpolysiloxane

PRIMARY APPLICATIONS

Drugs
Pharmaceuticals
Herbicides
Steroids
PAHs
Tocopherols
PCBs
EPA Methods
Pesticides
508, 608 and 8080

0.25 mm ID	df	Prod No
15 meters	0.25	CFS-D01525-025B
15 meters	0.50	CFS-D01525-050B
30 meters	0.15	CFS-D03025-015B
30 meters	0.25	CFS-D03025-025B
30 meters	0.50	CFS-D03025-050B
60 meters	0.25	CFS-D06025-025B
60 meters	0.50	CFS-D06025-050B
0.32 mm ID	df	Prod No
15 meters	0.25	CFS-D01532-025B
15 meters	0.50	CFS-D01532-050B
15 meters	1.00	CFS-D01532-100B
30 meters	0.25	CFS-D03032-025B
30 meters	0.50	CFS-D03032-050B
30 meters	1.00	CFS-D03032-100B

0.32 mm ID, cont'd	Prod No	
60 meters	0.25	CFS-D06032-025B
60 meters	0.50	CFS-D06032-050B
60 meters	1.00	CFS-D06032-100B
0.53 mm ID	df	Prod No
15 meters	0.50	CFS-D01553-050B
15 meters	0.83	CFS-D01553-083B
15 meters	1.00	CFS-D01553-100B
30 meters	0.50	CFS-D03053-050B
30 meters	0.83	CFS-D03053-083B
30 meters	1.00	CFS-D03053-100B
60 meters	0.50	CFS-D06053-050B
60 meters	0.83	CFS-D06053-083B
60 meters	1.00	CFS-D06053-100B

REPLACES

DB-17, AT-50,
SP-2250, DB-17ms,
BPX-50, SP-17,
DB-608, 007-17,
SPB-608, HP-50+,
SPB-50, ZB-50,
Rtx-50

GC CAPILLARY COLUMNS

VB-Wax

100% bonded polyethylene glycol

REPLACES

DB-WAX, DB-WAXetr, HP-WAX, HP-InnoWAX, HP-20M, CB-WAX, Stabilwax, RtxWAX, SUPEROX II, SUPELCOWAX-10, BP-20, CP-WAX, 52 CB, GB-WAX, 007-CW, OV-WAX, AT-WAX, and ZB-WAX

0.10 mm ID	<i>df</i>	<i>Prod No</i>
10 meters	0.10	CFS-G01010-010A
20 meters	0.10	CFS-G02010-010A
0.18 mm ID	<i>df</i>	<i>Prod No</i>
10 meters	0.18	CFS-G01018-018A
20 meters	0.18	CFS-G02018-018A
0.25 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.25	CFS-G01525-025A
30 meters	0.25	CFS-G03025-025A
60 meters	0.25	CFS-G06025-025A

0.32 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.25	CFS-G01532-025A
15 meters	0.50	CFS-G01532-050A
15 meters	1.00	CFS-G01532-100A
30 meters	0.25	CFS-G03032-025A
30 meters	0.50	CFS-G03032-050A
30 meters	1.00	CFS-G03032-100A
60 meters	0.25	CFS-G06032-025A
60 meters	0.50	CFS-G06032-050A
0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.50	CFS-G01553-050A
15 meters	1.00	CFS-G01553-100A
30 meters	0.50	CFS-G03053-050A
30 meters	1.00	CFS-G03053-100A
60 meters	1.00	CFS-G06053-100A

PRIMARY APPLICATIONS

Alcohols
Aldehydes
Aromatics
Flavors
Fragrances
Organic Acids
Solvents

VB-624/1301

(6% Cyanopropyl-phenyl)-methylpolysiloxane

REPLACES

DB-624, HP-624, HP-VOC, Rtx-624, Rtx-Volatiles, BP-624, Vocol, 007-624, 007-502, NON-PAKD, 624, ZB-624

0.18 mm ID	<i>df</i>	<i>Prod No</i>
10 meters	1.00	CFS-E01018-100A
20 meters	1.00	CFS-E02018-100A
30 meters	1.00	CFS-E03018-100A
40 meters	1.00	CFS-E04018-100A
0.20 mm ID	<i>df</i>	<i>Prod No</i>
25 meters	1.12	CFS-E02520-112A
0.25 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	1.40	CFS-E01525-140A
30 meters	1.40	CFS-E03025-140A
60 meters	1.40	CFS-E06025-140A

0.32 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	1.80	CFS-E01532-180A
30 meters	1.80	CFS-E03032-180A
60 meters	1.80	CFS-E06032-180A
0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	3.00	CFS-E01553-300A
30 meters	3.00	CFS-E03053-300A
60 meters	3.00	CFS-E06053-300A
75 meters	3.00	CFS-E07553-300A

PRIMARY APPLICATIONS

EPA Methods
501.3
502.2
503.1
524.2
601
602
8010
8015
8020
8240

VB-1701

(14% Cyanopropyl-phenyl)-methylpolysiloxane

REPLACES

DB-1701, 007-1701, HP-1701, CP-Sil 19 CB, Rtx-1701, SPB-1701, BP-10, ZB-1701

0.25 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.25	CFS-F01525-025A
15 meters	0.50	CFS-F01525-050A
30 meters	0.25	CFS-F03025-025A
30 meters	0.50	CFS-F03025-050A
60 meters	0.25	CFS-F06025-025A
60 meters	0.50	CFS-F06025-050A
0.32 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.25	CFS-F01532-025A
15 meters	0.50	CFS-F01532-050A
15 meters	1.00	CFS-F01532-100A
30 meters	0.25	CFS-F03032-025A
30 meters	0.50	CFS-F03032-050A
30 meters	1.00	CFS-F03032-100A

0.32 mm ID, cont'd	<i>df</i>	<i>Prod No</i>
60 meters	0.25	CFS-F06032-025A
60 meters	0.50	CFS-F06032-050A
60 meters	1.00	CFS-F06032-100A
0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	0.50	CFS-F01553-050A
15 meters	1.00	CFS-F01553-100A
30 meters	0.50	CFS-F03053-050A
30 meters	1.00	CFS-F03053-100A
60 meters	0.50	CFS-F06053-050A
60 meters	1.00	CFS-F06053-100A

PRIMARY APPLICATIONS

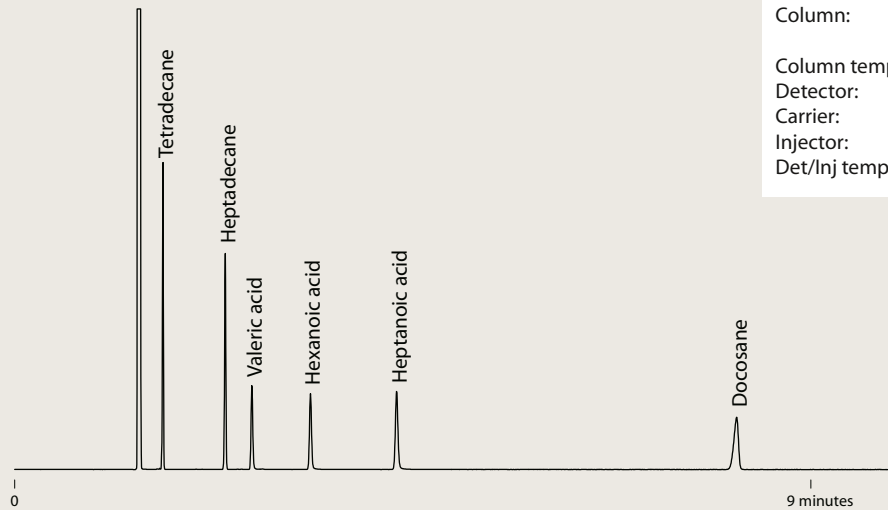
Drugs
PAHs
PCBs
Pesticides
Phenols
Solvents
Tranquilizers

TO ORDER

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Fax360-697-6682

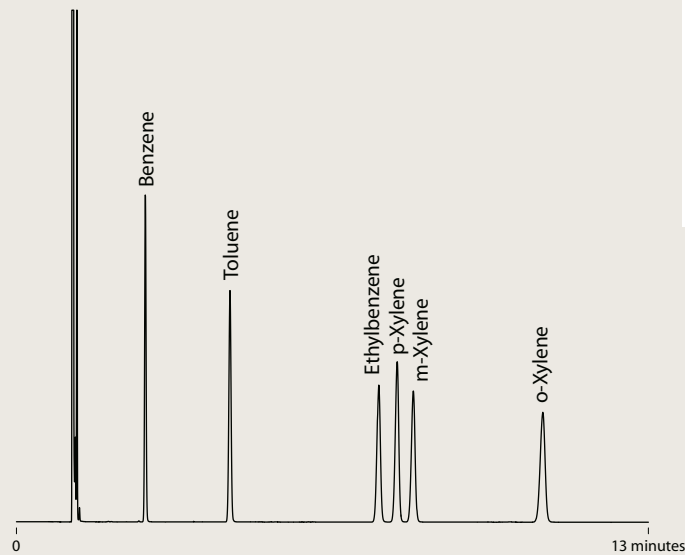
columns@vici.com

VB-Wax

**FREE FATTY ACIDS**

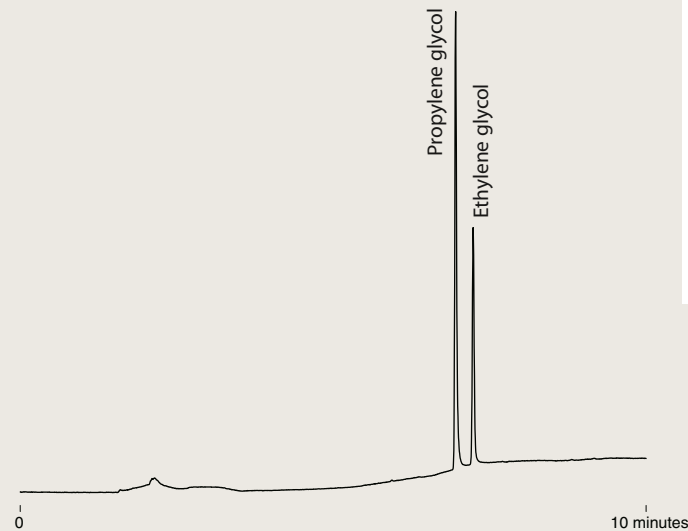
Column: VB-Wax
 30m x .25mm x .25 μ m
 Column temp: 170°C isothermal
 Detector: FID
 Carrier: Hydrogen at 40 cm/sec
 Injector: Split 100:1
 Det/Inj temp: 220°C

VB-Wax

**BTEX**

Column: VB-Wax
 30m x .25mm x .25 μ m
 Column temp: 40°C isothermal
 Detector: FID
 Carrier: Hydrogen
 Injector: .5 μ l 100:1 split
 Det/Inj temp: 220°C

VB-Wax

**GLYCOLS**

Sample: 50 ppm EG, PG
 Column: VB-Wax
 30m x .53mm x 1.00 μ m
 Column temp: 80°C for 1 min,
 to 200°C @ 20°C/min,
 hold 5 min
 Detector: FID
 Carrier: Helium at 5 psi
 Injector: 1 μ l splitless, .5 min
 Det/Inj temp: 220°C

GC CAPILLARY COLUMNS

Molesieve 5Å

Molesieve 5Å

REPLACES

GS-Molesieve 5A
 HP-PLOT Molesieve
 CP-Molesieve 5A
 Rt-Msieve-5A
 MXT-Msieve-51
 PLT-5A

ValcoPLOT Molesieve 5Å PLOT columns offer greatly enhanced analytical efficiency at economical prices. Our proprietary bonding technology ensures that the particles stay put even when columns are used with valves. Our thick film columns separate Ar/O₂ without the need for cryogenic equipment. The thin film columns offer fast elution of carbon monoxide with near perfect peak symmetry.

PRIMARY APPLICATIONS
 Gases

TO ORDER

For prices or more information about your specific application, contact VICI Metronics:

Toll-free 877-737-1887
 Tel360-697-9199
 Fax360-697-6682

columns@vici.com

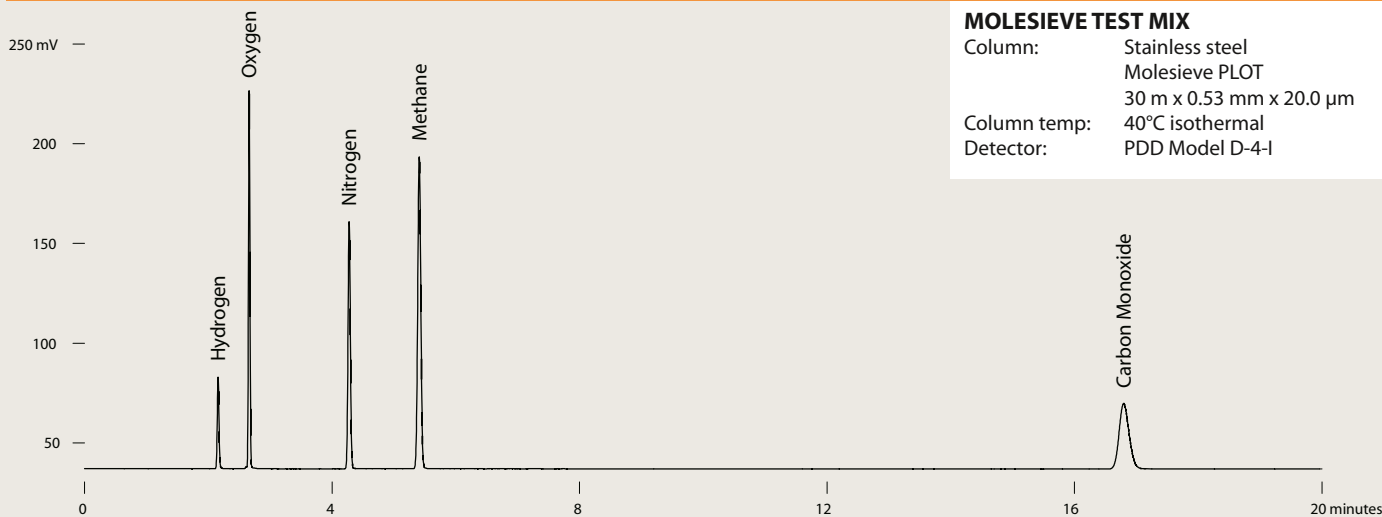
Fused silica

0.53 mm ID	df	Prod No
15 meters	20	CFS-X1553-200
15 meters	50	CFS-X1553-500
30 meters	20	CFS-X3053-200
30 meters	50	CFS-X3053-500

Stainless steel

0.53 mm ID	df (µm)	Prod No
15 meters	20	CSS-X1553-200
30 meters	20	CSS-X3053-200
30 meters	50	CSS-X3053-500

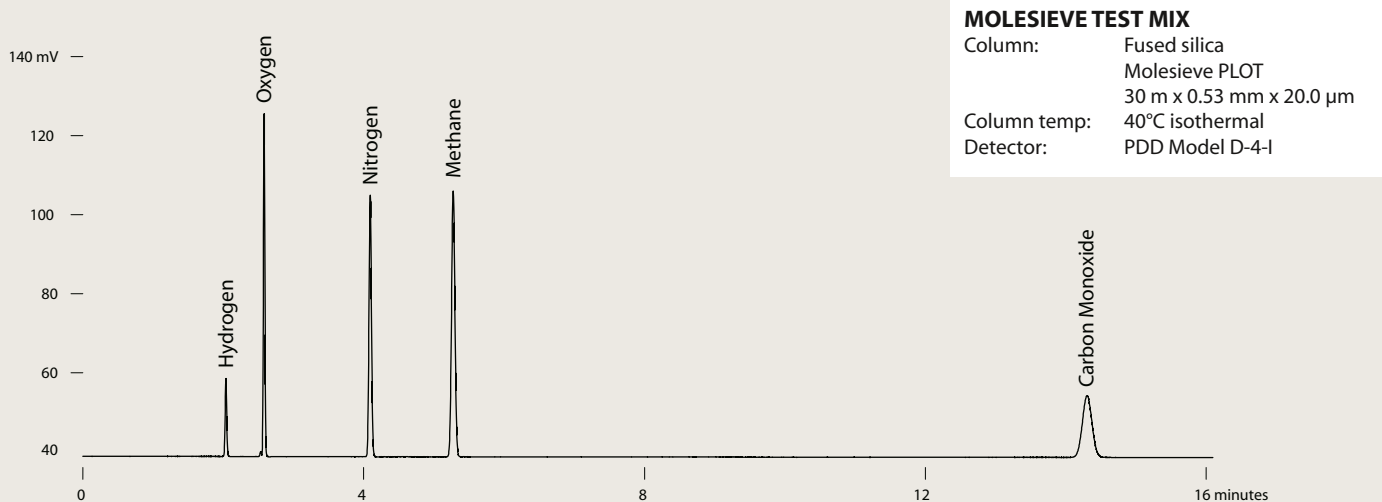
ValcoPLOT Molesieve 5Å – Stainless steel



MOLESIEVE TEST MIX

Column: Stainless steel
 Molesieve PLOT
 30 m x 0.53 mm x 20.0 µm
 Column temp: 40°C isothermal
 Detector: PDD Model D-4-I

ValcoPLOT Molesieve 5Å – Fused silica



MOLESIEVE TEST MIX

Column: Fused silica
 Molesieve PLOT
 30 m x 0.53 mm x 20.0 µm
 Column temp: 40°C isothermal
 Detector: PDD Model D-4-I

ValcoPLOT Molesieve 5Å – Fused silica

AIR
 Column: Fused silica
 Molesieve PLOT
 30 m x 0.53 mm x 50.0 μm
 Column temp: 40°C isothermal
 Detector: PDD Model D-4-I
 Carrier: Helium @ 25cm/sec



GC CAPILLARY COLUMNS

Alumina

Aluminum oxide

REPLACES

GS-Alumina
HP-PLOT Al2O3
CP-Al2O3/KCl
CP-Al2O3/Na2SO4
Rt-alumina-PLOT
Al2O3/KCl
Al2O3/Na2SO4

With ValcoPLOT Al₂O₃ PLOT columns there's no need for cryogenic equipment to analyze C1 - C5 hydrocarbons in a main stream of C1 - C5 hydrocarbons. ValcoPLOT Al₂O₃ columns are deactivated with small salt crystals stable to 200°C. KCl deactivation produces a relatively apolar column while Na₂SO₄ produces columns exhibiting increased retention of unsaturated hydrocarbons.

PRIMARY APPLICATIONS

C1 - C5 hydrocarbons

VP-Alumina/KCl

VP-Alumina/Na2SO4

Fused silica

Fused silica

0.53 mm ID	df	Prod No
15 meters	10	CFS-Y1553-100
30 meters	10	CFS-Y3053-100
50 meters	10	CFS-Y5053-100

0.53 mm ID	df	Prod No
15 meters	10	CFS-Z1553-100
30 meters	10	CFS-Z3053-100
50 meters	10	CFS-Z5053-100

ValcoPLOT A

High purity Divinylbenzene/ethyleneglycoldimethacrylate

Fused silica

0.32 mm ID	df (µm)	Prod No
15 meters	10	CFS-PA1532-100
30 meters	10	CFS-PA3032-100

0.53 mm ID	df	Prod No
15 meters	20	CFS-PA1553-200
30 meters	30	CFS-PA3053-200

PRIMARY APPLICATIONS

Solvents
Light gases
Light hydrocarbons
Residual solvents

ValcoPLOT D

High purity Divinylbenzene

Fused silica

0.32 mm ID	df	Prod No
15 meters	10	CFS-PD1532-100
30 meters	10	CFS-PD3032-100

0.53 mm ID	df	Prod No
15 meters	20	CFS-PD1553-200
30 meters	20	CFS-PD3053-200

PRIMARY APPLICATIONS

Solvents
Hydrocarbons
Alcohols
Sulfur compounds
Residual solvents
Halogenated hydrocarbons

ValcoPLOT Q

Divinylbenzene

Fused silica

0.32 mm ID	df	Prod No
15 meters	10	CFS-PQ1532-100
30 meters	10	CFS-PQ3032-100

0.53 mm ID	df	Prod No
15 meters	20	CFS-PQ1553-200
30 meters	20	CFS-PQ3053-200

PRIMARY APPLICATIONS

Note: We highly recommend ValcoPLOT D, which has similar retention characteristics but is made from higher purity raw materials.

TO ORDER

Toll-free 877-737-1887
Tel360-697-9199
Fax360-697-6682

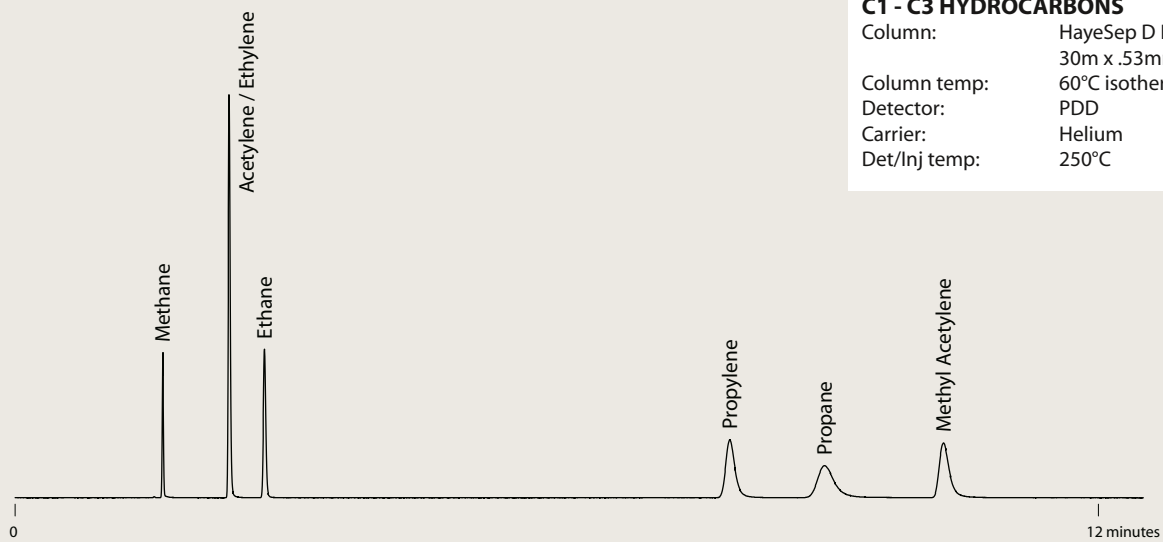
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ValcoPLOT A

**C1 - C3 HYDROCARBONS**

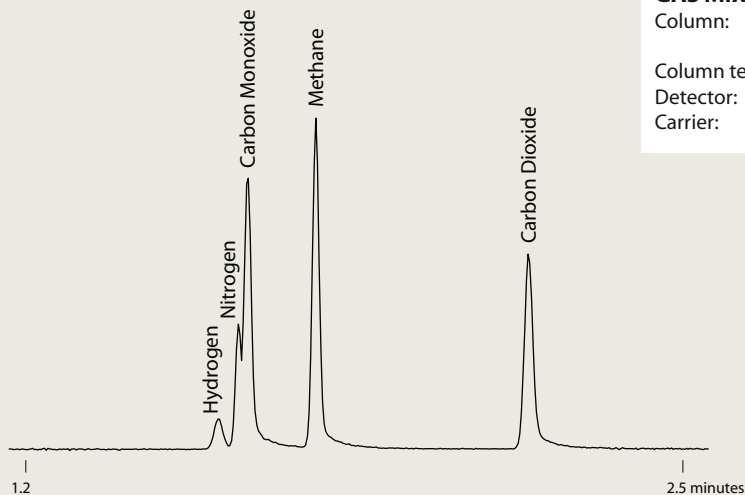
Column: HayeSep A PLOT
30m x .53mm x 20.0µm
Column temp: 60°C isothermal
Detector: PDD
Carrier: Helium
Det/Inj temp: 165°C

ValcoPLOT D

**C1 - C3 HYDROCARBONS**

Column: HayeSep D PLOT
30m x .53mm x 20.0µm
Column temp: 60°C isothermal
Detector: PDD
Carrier: Helium
Det/Inj temp: 250°C

ValcoPLOT D

**GAS MIXTURE**

Column: HayeSep D PLOT
30m x .53mm x 20.0µm
Column temp: 40°C isothermal
Detector: PDD
Carrier: Helium

GC CAPILLARY COLUMNS

ValcoPLOT B*Divinylbenzene/polyethyleneimine***Fused silica**

0.32 mm ID	<i>df</i>	<i>Prod No</i>	0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	10	CFS-PB1532-100	15 meters	20	CFS-PB1553-200
30 meters	10	CFS-PB3032-100	30 meters	20	CFS-PB3053-200

ValcoPLOT C*Divinylbenzene/acrylonitrile***Fused silica**

0.32 mm ID	<i>df</i>	<i>Prod No</i>	0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	10	CFS-PC1532-100	15 meters	20	CFS-PC1553-200
30 meters	10	CFS-PC3032-100	30 meters	20	CFS-PC3053-200

ValcoPLOT N*Divinylbenzene/ethyleneglycoldimethacrylate***Fused silica**

0.32 mm ID	<i>df</i>	<i>Prod No</i>	0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	10	CFS-PN1532-100	15 meters	20	CFS-PN1553-200
30 meters	10	CFS-PN3032-100	30 meters	20	CFS-PN3053-200

ValcoPLOT P*Divinylbenzene/styrene***Fused silica**

0.32 mm ID	<i>df</i>	<i>Prod No</i>	0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	10	CFS-PP1532-100	15 meters	20	CFS-PP1553-200
30 meters	10	CFS-PP3032-100	30 meters	20	CFS-PP3053-200

ValcoPLOT R*Divinylbenzene/N-vinyl-2-pyrrolidinone***Fused silica**

0.32 mm ID	<i>df</i>	<i>Prod No</i>	0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	10	CFS-PR1532-100	15 meters	20	CFS-PR1553-200
30 meters	10	CFS-PR3032-100	30 meters	20	CFS-PR3053-200

ValcoPLOT S*Divinylbenzene/4-vinyl-pyridine***Fused silica**

0.32 mm ID	<i>df</i>	<i>Prod No</i>	0.53 mm ID	<i>df</i>	<i>Prod No</i>
15 meters	10	CFS-PS1532-100	15 meters	20	CFS-PS1553-200
30 meters	10	CFS-PS3032-100	30 meters	20	CFS-PS3053-200

TO ORDER

For prices or more information about your specific application, contact VICI Metronics:

Toll-free 877-737-1887
Tel360-697-9199
Fax360-697-6682

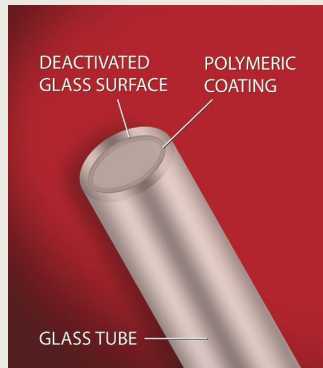
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- Reduce breakdown of Endrin and DDT
- Increase the interval between liner changes

DDT and Endrin are easily degraded in the injection port; with non-deactivated liners and those filled with non-deactivated glass wool, Endrin breakdown can be as high as 98%. EPA method 8081A states, "If degradation of either DDT or Endrin exceeds 15%, take corrective action before proceeding with calibration."

VICI reduced breakdown liners are produced by applying a highly-crosslinked siloxane over a conventionally deactivated liner. The resulting liner contributes less to breakdown than any other component of the injection system.



Reduced breakdown injection port liners

Package of 5 liners.

For injector	Description	Prod No
Agilent/Thermo	2 mm straight splitless	LNR-HP2-5
	4 mm straight splitless	LNR-HP4-5
	2 mm gooseneck	LNR-GS2-5
	4 mm gooseneck	LNR-GS4-5
	4 mm double gooseneck	LNR-DGS4-5
Gerstel CIS-4/PTV	Baffled	LNR-CIS4-B-5
Varian CP-1177	2 mm gooseneck	LNR-GS2-5
	4 mm gooseneck	LNR-GS4-5
Varian 1078/1079	2 mm gooseneck	LNR-VARGS2-5
	3.4 mm gooseneck	LNR-VAR3.4-5

