



Ohio Valley Specialty  
C O M P A N Y

**OV *Fast***

YOUR NEED FOR SPEED SOLVED

# OHIO VALLEY FAST GC COLUMN GUIDE

TRUSTED PARTNER SINCE 1966

“

***THERE IS MORE TO LIFE THAN  
TO INCREASE IT'S SPEED.***

”

— MAHATMA GANDHI

**OVFAST**

***THAT MAY BE TRUE FOR GANDHI,***  
BUT IF YOU HAVE MANY SAMPLES TO  
TEST IN A VERY SHORT TIME YOU SHOULD  
CONSIDER THE OVFAST COLUMN. ALL OF  
OUR OVFAST COLUMNS ARE MADE WITH  
GENUINE OV STATIONARY PHASES TO  
CREATE THE OPTIMUM COLUMN OF BOTH  
QUALITY AND SPEED.

EACH OVFAST COLUMN IS INDIVIDUALLY  
PRETESTED AND ONLY THE BEST OF THE  
BEST WILL QUALIFY FOR THE OVFAST  
COLUMN DESIGNATION.



# OV-1 GC COLUMNS

(100% DIMETHYLPOLYSILOXANE)

### FEATURES

Non Polar, Bonded and Crosslinked,  
Wide Range of Applications, High Temperature  
Range, Equivalent to USP Phase G2.

### APPLICATIONS

Amines, Flavors, Fragrances, Hydrocarbons,  
PCB's, Pesticides, Phenols.

### SIMILAR PHASES

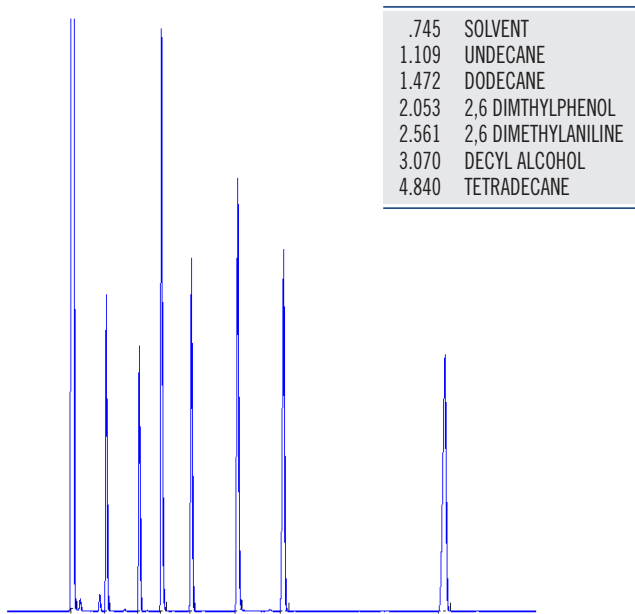
BP-1, CP-Sil 5CB, DB-1, HP-1, HP-101,  
Rtx-1, SE-30, SP-2100, SPB-1, ZB-1.

PART #	DESCRIPTION
110-100.10	10 Meter x 0.10 mm ID OV-1 Bonded 0.10 um
120-100.10	20 Meter x 0.10 mm ID OV-1 Bonded 0.10 um
110-180.18	10 Meter x 0.18 mm ID OV-1 Bonded 0.18 um
110-180.20	10 Meter x 0.18 mm ID OV-1 Bonded 0.20 um
120-180.18	20 Meter x 0.18 mm ID OV-1 Bonded 0.18 um
120-180.20	20 Meter x 0.18 mm ID OV-1 Bonded 0.20 um
140-180.20	40 Meter x 0.18 mm ID OV-1 Bonded 0.20 um
110-180.40	10 Meter x 0.18 mm ID OV-1 Bonded 0.40 um
120-180.40	20 Meter x 0.18 mm ID OV-1 Bonded 0.40 um
140-180.40	40 Meter x 0.18 mm ID OV-1 Bonded 0.40 um

## COLUMN PERFORMANCE TEST MIX

PART NO: 110-100.10 SERIAL NO: 125255

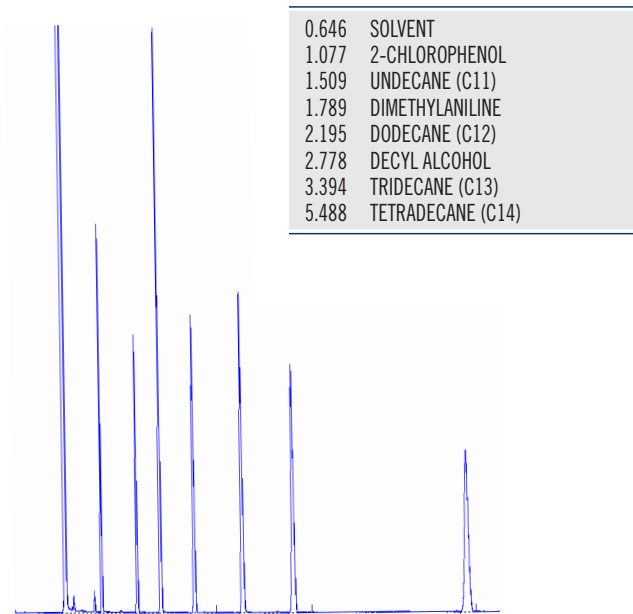
DESCRIPTION: 10m x 0.10mm x 0.10 µF LIQUID PHASE: OV-1  
 MAX PROGRAMMED TEMP: 350°C MAX ISOTHERMAL TEMP: 325°C  
 COLUMN TEMP ISOTHERMAL: 120°C  
 INJECTOR TEMP: 250°C FID DETECTOR TEMP: 300°C  
 CARRIER GAS: HELIUM HOLD UP TIME COMPOUND: METHANE (0.60 min)



## COLUMN PERFORMANCE TEST MIX

PART NO: 120-180.20 SERIAL NO: 125251

DESCRIPTION: 20m x 0.18mm x 0.20 µF LIQUID PHASE: OV-1  
 MAX PROGRAMMED TEMP: 350°C MAX ISOTHERMAL TEMP: 325°C  
 COLUMN TEMP: 120°C  
 INJECTOR TEMP: 250°C FID DETECTOR TEMP: 300°C  
 CARRIER GAS: HELIUM HOLD UP TIME COMPOUND: METHANE (0.62 min)





# OV-5 GC COLUMNS

(5% DIPHENYL, 95% DIMETHYLPOLYSILOXANE)

### FEATURES

Non Polar, Bonded and Crosslinked, High Temperature Range, Solvent Rinsable, General Purpose Column, Equivalent to USP G27.

### APPLICATIONS

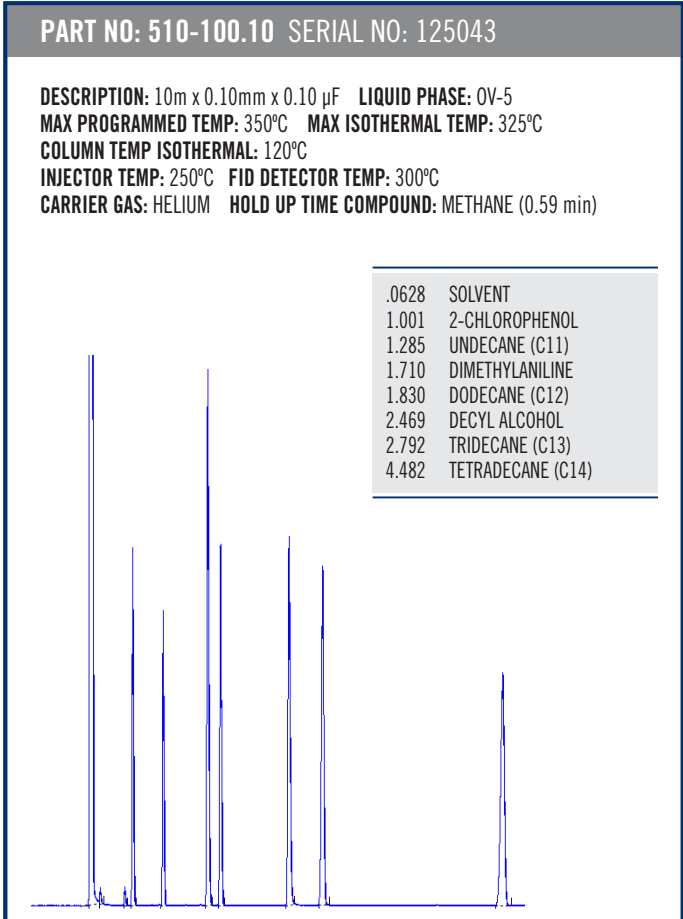
Alkaloids, Aromatics, Drugs of Abuse, Fatty Acid Methyl Esters, Herbicides, Hydrocarbons, Halogenated Compounds, Pesticides.

### SIMILAR PHASES

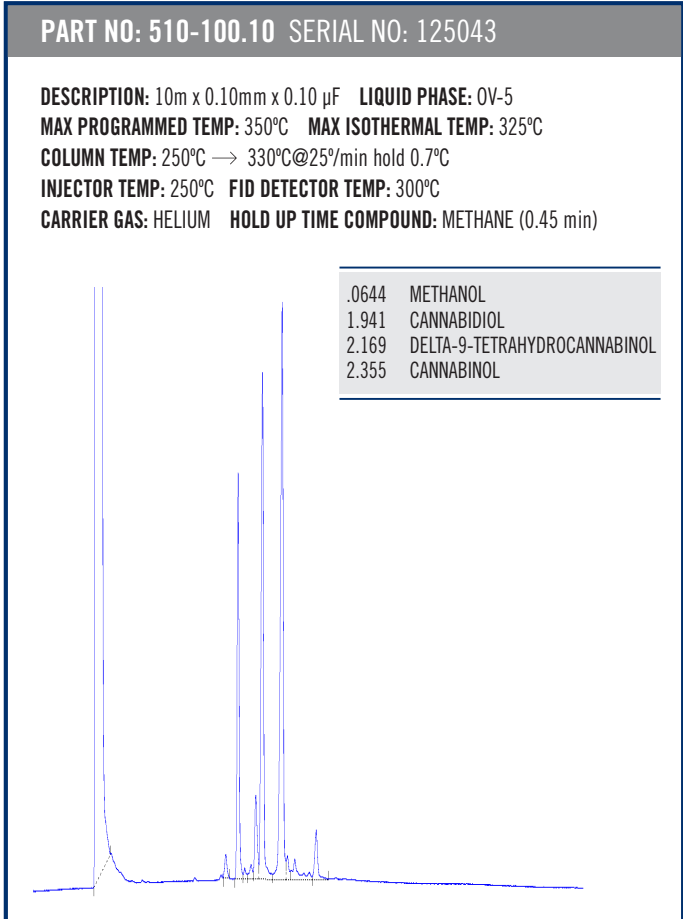
AT-5, BP-5, CP-Sil 8CB, DB-5, EC-5, HP-5, SPB-5, Rtx-5, ZB-5, 007-5.

PART #	DESCRIPTION
510-100.10	10 Meter x 0.10 mm ID OV-5 Bonded 0.10 um
520-100.10	20 Meter x 0.10 mm ID OV-5 Bonded 0.10 um
510-180.20	10 Meter x 0.18 mm ID OV-5 Bonded 0.20 um
510-180.18	10 Meter x 0.18 mm ID OV-5 Bonded 0.18 um
520-180.18	20 Meter x 0.18 mm ID OV-5 Bonded 0.18 um
520-180.20	20 Meter x 0.18 mm ID OV-5 Bonded 0.20 um
540-180.20	40 Meter x 0.18 mm ID OV-5 Bonded 0.20 um
510-180.40	10 Meter x 0.18 mm ID OV-5 Bonded 0.40 um
520-180.40	20 Meter x 0.18 mm ID OV-5 Bonded 0.40 um
540-180.40	40 Meter x 0.18 mm ID OV-5 Bonded 0.40 um

## COLUMN PERFORMANCE TEST MIX



## CANNABIS POTENCY TEST MIX





# OV-1301 GC COLUMNS

(6% CYANOPROPYLPHENYL, 94% METHYLPOLYSILOXANE)

### FEATURES

Low to Mid Polarity, Bonded and Crosslinked, Solvent Rinsable, Equivalent to USP Phase G43.

### APPLICATIONS

Volatile Organics, Pharmaceutical Samples, Alcohols, Oxygenates, Pesticides, Aroclors, PCB's.

### SIMILAR PHASES

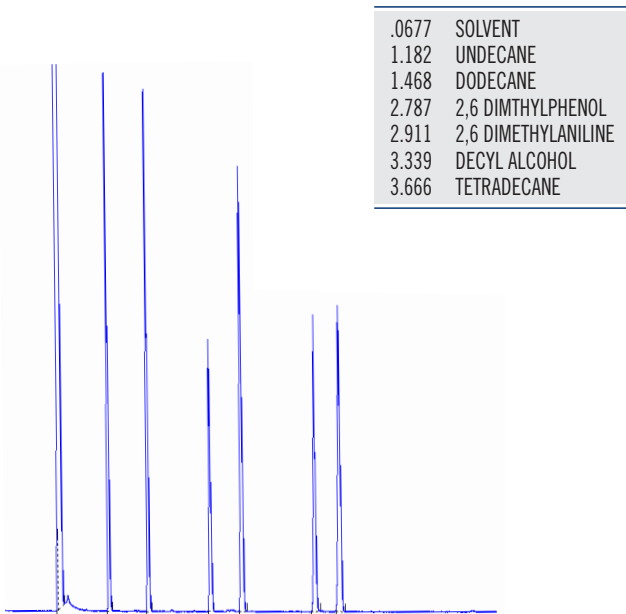
DB-1301, HP-1301, PE-1301, Rtx-1301.

PART #	DESCRIPTION
810-180.40	10 Meter x 0.18 mm ID OV-1301 Bonded 0.40 um
810-100.10	10 Meter x 0.10 mm ID OV-1301 Bonded 0.10 um
820-100.10	20 Meter x 0.10 mm ID OV-1301 Bonded 0.10 um
810-180.20	10 Meter x 0.18 mm ID OV-1301 Bonded 0.20 um
810-180.18	10 Meter x 0.18 mm ID OV-1301 Bonded 0.18 um
820-180.18	20 Meter x 0.18 mm ID OV-1301 Bonded 0.18 um
820-180.20	20 Meter x 0.18 mm ID OV-1301 Bonded 0.20 um
840-180.20	40 Meter x 0.18 mm ID OV-1301 Bonded 0.20 um
810-180.40	10 Meter x 0.18 mm ID OV-1301 Bonded 0.40 um
820-180.40	20 Meter x 0.18 mm ID OV-1301 Bonded 0.40 um
840-180.40	40 Meter x 0.18 mm ID OV-1301 Bonded 0.40 um

## COLUMN PERFORMANCE TEST MIX

PART NO: 810-100.10 SERIAL NO: 986322

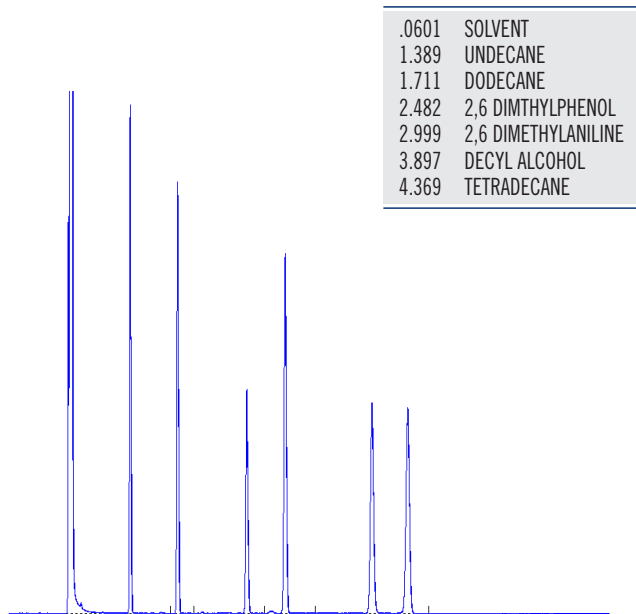
DESCRIPTION: 10m x 0.10mm x 0.10 µF LIQUID PHASE: OV-1301  
 MAX PROGRAMMED TEMP: 270°C MAX ISOTHERMAL TEMP: 260°C  
 COLUMN TEMP ISOTHERMAL: 120°C  
 INJECTOR TEMP: 250°C FID DETECTOR TEMP: 300°C  
 CARRIER GAS: HELIUM HOLD UP TIME COMPOUND: METHANE (0.59 min)



## COLUMN PERFORMANCE TEST MIX

PART NO: 820-180.20 SERIAL NO: 897888

DESCRIPTION: 20m x 0.18mm x 0.20 µF LIQUID PHASE: OV-1301  
 MAX PROGRAMMED TEMP: 270°C MAX ISOTHERMAL TEMP: 270°C  
 COLUMN TEMP: 120°C  
 INJECTOR TEMP: 250°C FID DETECTOR TEMP: 300°C  
 CARRIER GAS: HELIUM HOLD UP TIME COMPOUND: METHANE (0.6 min)





# OV-1701 GC COLUMNS

(14% CYANOPROPYLPHENYL, 86% METHYLPOLYSILOXANE)

### FEATURES

Midpolarity Crossbond Phase, Equivalent to USP G46.

### APPLICATIONS

Pharmaceutical Samples, Alcohols, Oxygenates, Pesticides, Aroclors, PCBs, Solvents.

### SIMILAR PHASES

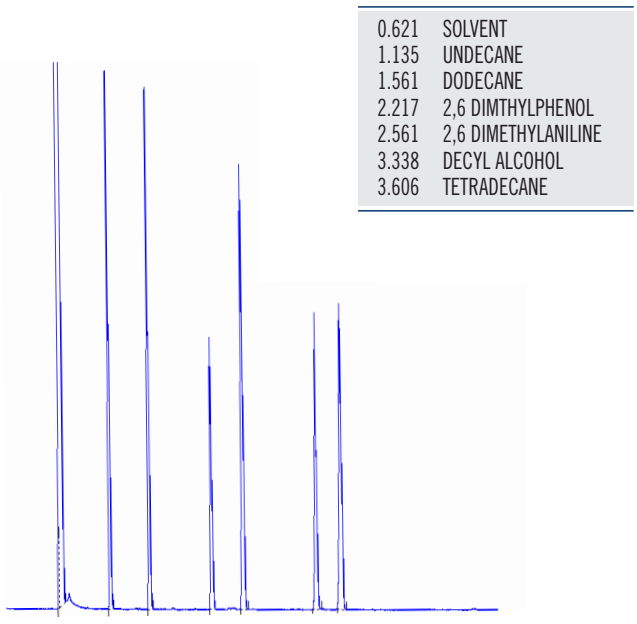
AT-1701, BP-10, CP-Sil 19 CB, DB-1701, Equity-1701, Rtx-1701.

PART #	DESCRIPTION
410-100.10	10 Meter x 0.10 mm ID OV-1701 Bonded 0.10 um
420-100.10	20 Meter x 0.10 mm ID OV-1701 Bonded 0.10 um
410-180.18	10 Meter x 0.18 mm ID OV-1701 Bonded 0.18 um
410-180.20	10 Meter x 0.18 mm ID OV-1701 Bonded 0.20 um
420-180.18	20 Meter x 0.18 mm ID OV-1701 Bonded 0.18 um
420-180.20	20 Meter x 0.18 mm ID OV-1701 Bonded 0.20 um
440-180.20	40 Meter x 0.18 mm ID OV-1701 Bonded 0.20 um
410-180.40	10 Meter x 0.18 mm ID OV-1701 Bonded 0.40 um
420-180.40	20 Meter x 0.18 mm ID OV-1701 Bonded 0.40 um
440-180.40	40 Meter x 0.18 mm ID OV-1701 Bonded 0.40 um

## COLUMN PERFORMANCE TEST MIX

PART NO: 410-100.10 SERIAL NO: 125237

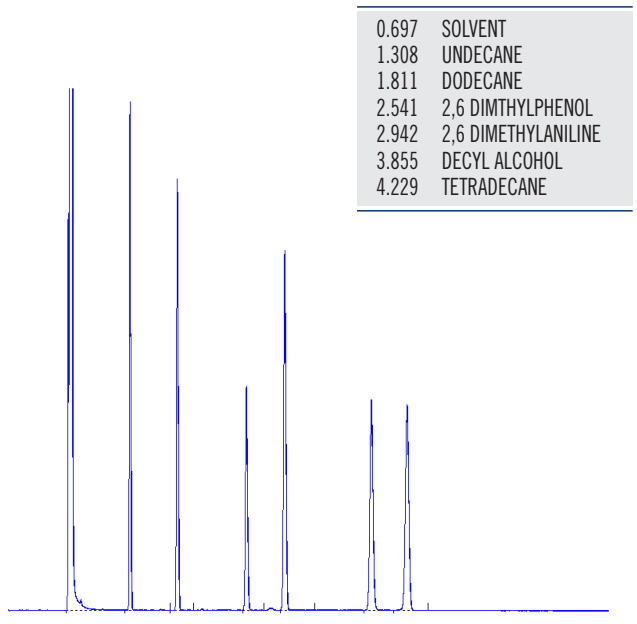
DESCRIPTION: 10m x 0.10mm x 0.10 µF LIQUID PHASE: OV-1701  
 MAX PROGRAMMED TEMP: 270°C MAX ISOTHERMAL TEMP: 260°C  
 COLUMN TEMP ISOTHERMAL: 120°C  
 INJECTOR TEMP: 250°C FID DETECTOR TEMP: 300°C  
 CARRIER GAS: HELIUM HOLD UP TIME COMPOUND: METHANE (0.59 min)



## COLUMN PERFORMANCE TEST MIX

PART NO: 420-180.20 SERIAL NO: 125206

DESCRIPTION: 20m x 0.18mm x 0.20 µF LIQUID PHASE: OV-1701  
 MAX PROGRAMMED TEMP: 270°C MAX ISOTHERMAL TEMP: 270°C  
 COLUMN TEMP: 120°C  
 INJECTOR TEMP: 250°C FID DETECTOR TEMP: 300°C  
 CARRIER GAS: HELIUM HOLD UP TIME COMPOUND: METHANE (0.6 min)





# OV-624 GC COLUMNS

(DESIGNED FOR THE ANALYSIS OF PRIORITY POLLUTANTS)

### FEATURES

Bonded and Crosslinked, Solvent Rinsable.  
 Designed for the Analysis of Priority Pollutants.

### APPLICATIONS

EPA Method 502.2 Volatile Organics.

### SIMILAR PHASES

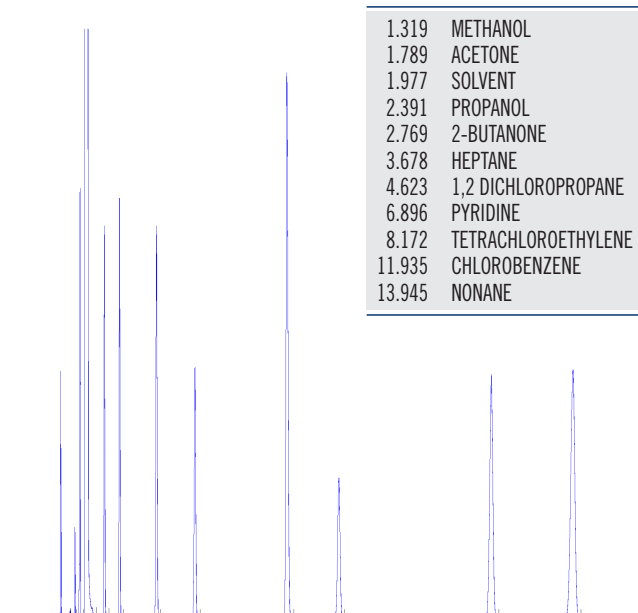
007-624, AT-624, CP-624, DB-624, HP-624,  
 RTX-Volatiles, RTX-502.2, and VOCOL.

PART #	DESCRIPTION
620-1804	20 Meter x 0.18 mm ID OV-624 Bonded 1.00 um
640-1804	40 Meter x 0.18 mm ID OV-624 Bonded 1.00 um
610-100.10	10 Meter x 0.10 mm ID OV-624 Bonded 0.10 um
620-100.10	20 Meter x 0.10 mm ID OV-624 Bonded 0.10 um
610-180.20	10 Meter x 0.18 mm ID OV-624 Bonded 0.20 um
610-180.18	10 Meter x 0.18 mm ID OV-624 Bonded 0.18 um
620-180.18	20 Meter x 0.18 mm ID OV-624 Bonded 0.18 um
620-180.20	20 Meter x 0.18 mm ID OV-624 Bonded 0.20 um
640-180.20	40 Meter x 0.18 mm ID OV-624 Bonded 0.20 um
610-180.40	10 Meter x 0.18 mm ID OV-624 Bonded 0.40 um
620-180.40	20 Meter x 0.18 mm ID OV-624 Bonded 0.40 um
640-180.40	40 Meter x 0.18 mm ID OV-624 Bonded 0.40 um

## COLUMN PERFORMANCE TEST MIX

**PART NO: 620-1804 SERIAL NO: 125039**

**DESCRIPTION:** 20m x 0.18mm x 1.0 µF    **LIQUID PHASE:** OV-624  
**MAX PROGRAMMED TEMP:** 240°C    **MAX ISOTHERMAL TEMP:** 240°C  
**COLUMN TEMP:** 65°C  
**INJECTOR TEMP:** 250°C    **FID DETECTOR TEMP:** 300°C  
**CARRIER GAS:** HELIUM    **HOLD UP TIME COMPOUND:** METHANE (1.0 min)



1.319	METHANOL
1.789	ACETONE
1.977	SOLVENT
2.391	PROPANOL
2.769	2-BUTANONE
3.678	HEPTANE
4.623	1,2-DICHLOROPROPANE
6.896	PYRIDINE
8.172	TETRACHLOROETHYLENE
11.935	CHLOROBENZENE
13.945	NONANE



# CARBOWAX 20M GC COLUMNS

POLYETHYLENE GLYCOL (PEG)

### FEATURES

High Polarity, Bonded and Crosslinked,  
Solvent Rinsable, Equivalent to USP G16.

### APPLICATIONS

Alcohols, Aromatics, Essential Oils, Glycols,  
Polar Solvents.

### SIMILAR PHASES

CP-Wax, DB-Wax, HP-Innowax, PE-Wax,  
Rtx-Wax.

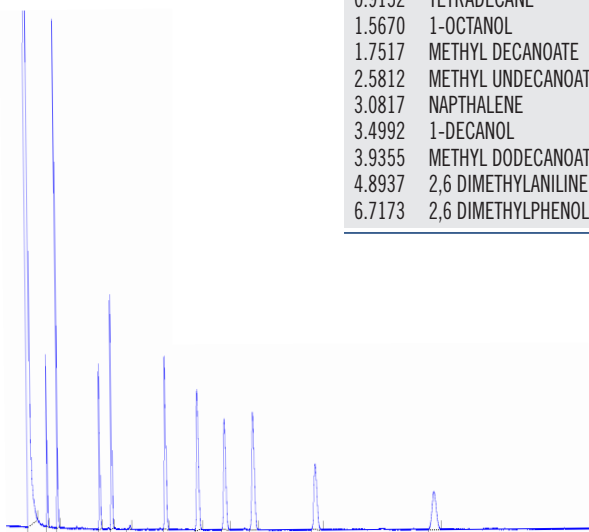
PART #	DESCRIPTION
210-180.18	10 Meter x 0.18 mm ID Carbowax 20M Bonded 0.18 um
210-180.20	10 Meter x 0.18 mm ID Carbowax 20M Bonded 0.20 um
220-180.18	20 Meter x 0.18 mm ID Carbowax 20M Bonded 0.18 um
220-180.20	20 Meter x 0.18 mm ID Carbowax 20M Bonded 0.20 um

## COLUMN PERFORMANCE TEST MIX

PART NO: 210-180.18 SERIAL NO: 125375

DESCRIPTION: 10m x 0.18mm x 0.18 µF LIQUID PHASE: CARBOWAX 20M  
 MAX PROGRAMMED TEMP: 280°C MAX ISOTHERMAL TEMP: 260°C  
 COLUMN TEMP ISOTHERMAL: 120°C  
 INJECTOR TEMP: 250°C FID DETECTOR TEMP: 300°C  
 CARRIER GAS: HELIUM HOLD UP TIME COMPOUND: METHANE (0.48 min)

0.4813	SOLVENT
0.7585	2-OCTANONE
0.9152	TETRADECANE
1.5670	1-OCTANOL
1.7517	METHYL DECANOATE
2.5812	METHYL UNDECANOATE
3.0817	NAPHTHALENE
3.4992	1-DECANOL
3.9355	METHYL DODECANOATE
4.8937	2,6 DIMETHYLANILINE
6.7173	2,6 DIMETHYLPHENOL

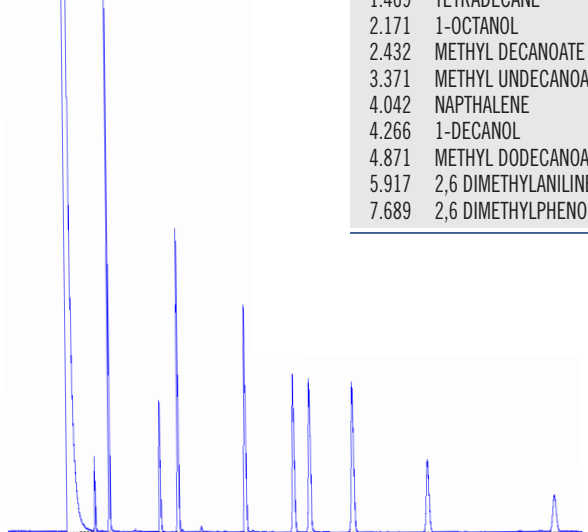


## COLUMN PERFORMANCE TEST MIX

PART NO: 220-180.18 SERIAL NO: 125390

DESCRIPTION: 20m x 0.18mm x 0.18 µF LIQUID PHASE: CARBOWAX 20M  
 MAX PROGRAMMED TEMP: 280°C MAX ISOTHERMAL TEMP: 260°C  
 COLUMN TEMP: 130°C  
 INJECTOR TEMP: 250°C FID DETECTOR TEMP: 300°C  
 CARRIER GAS: HELIUM HOLD UP TIME COMPOUND: METHANE (0.85 min)

0.906	SOLVENT
1.260	2-OCTANONE
1.469	TETRADECANE
2.171	1-OCTANOL
2.432	METHYL DECANOATE
3.371	METHYL UNDECANOATE
4.042	NAPHTHALENE
4.266	1-DECANOL
4.871	METHYL DODECANOATE
5.917	2,6 DIMETHYLANILINE
7.689	2,6 DIMETHYLPHENOL







# OV-351 GC COLUMNS

(NITROTEREPHTHALIC ACID MODIFIED PEG)

### FEATURES

High Polarity, Bonded and Crosslinked,  
Solvent Rinsable, Equivalent to USP G35.

PART #	DESCRIPTION
310-180.18	10 Meter x 0.18 mm ID OV-351 Bonded 0.18 um
320-180.18	20 Meter x 0.18 mm ID OV-351 Bonded 0.18 um

### APPLICATIONS

Underivatized Free Fatty Acids.

### SIMILAR PHASES

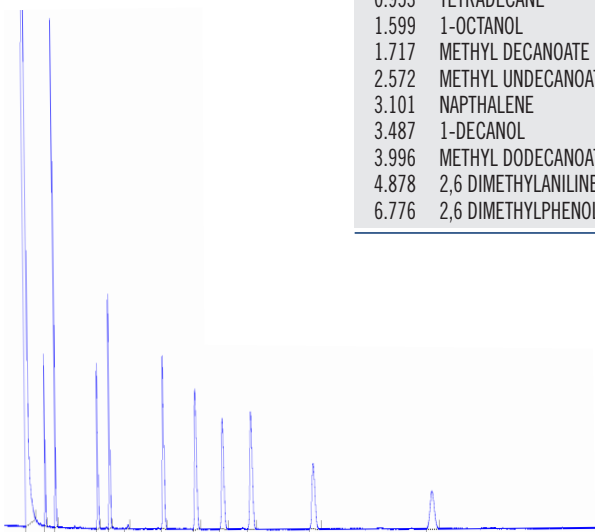
BP-21, CP-FFAP, DB-FFAP, FFAP, HP-FFAP,  
PE-FFAP, Nukol.

## COLUMN PERFORMANCE TEST MIX

**PART NO: 310-180.18** SERIAL NO: 456963

**DESCRIPTION:** 10m x 0.18mm x 0.18 µF **LIQUID PHASE:** OV-351  
**MAX PROGRAMMED TEMP:** 280°C **MAX ISOTHERMAL TEMP:** 260°C  
**COLUMN TEMP:** 120°C  
**INJECTOR TEMP:** 250°C **FID DETECTOR TEMP:** 300°C  
**CARRIER GAS:** HELIUM **HOLD UP TIME COMPOUND:** METHANE (0.48 min)

0.417	SOLVENT
0.752	2-OCTANONE
0.953	TETRADECANE
1.599	1-OCTANOL
1.717	METHYL DECANOATE
2.572	METHYL UNDECANOATE
3.101	NAPHTHALENE
3.487	1-DECANOL
3.996	METHYL DODECANOATE
4.878	2,6 DIMETHYLANILINE
6.776	2,6 DIMETHYLPHENOL

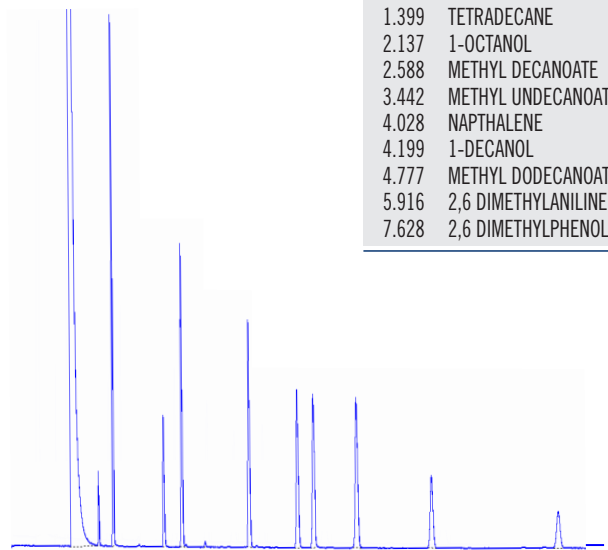


## COLUMN PERFORMANCE TEST MIX

**PART NO: 320-180.18** SERIAL NO: 872490

**DESCRIPTION:** 20m x 0.18mm x 0.18 µF **LIQUID PHASE:** OV-351  
**MAX PROGRAMMED TEMP:** 280°C **MAX ISOTHERMAL TEMP:** 260°C  
**COLUMN TEMP ISOTHERMAL:** 130°C  
**INJECTOR TEMP:** 250°C **FID DETECTOR TEMP:** 300°C  
**CARRIER GAS:** HELIUM **HOLD UP TIME COMPOUND:** METHANE (0.85 min)

0.963	SOLVENT
1.169	2-OCTANONE
1.399	TETRADECANE
2.137	1-OCTANOL
2.588	METHYL DECANOATE
3.442	METHYL UNDECANOATE
4.028	NAPHTHALENE
4.199	1-DECANOL
4.777	METHYL DODECANOATE
5.916	2,6 DIMETHYLANILINE
7.628	2,6 DIMETHYLPHENOL





# OV-SUPERWAX GC COLUMNS

POLYETHYLENE GLYCOL (PEG)

**FEATURES**

High polarity. Bonded and Crosslinked.  
Highest Upper Temperature Limits of PEG  
Phases. Our Lowest Bleed Wax Column. Solvent  
Rinseable. Equivalent to USP G16.

**PART # DESCRIPTION**

910-180.18	10 Meter x 0.18 mm ID OV-SUPERWAX Bonded 0.18 um
910-180.20	10 Meter x 0.18 mm ID OV-SUPERWAX Bonded 0.20 um
920-180.18	20 Meter x 0.18 mm ID OV-SUPERWAX Bonded 0.18 um
920-180.20	20 Meter x 0.18 mm ID OV-SUPERWAX Bonded 0.20 um

**APPLICATIONS**

Alcohols, Food, Aromatics, Essential Oils,  
Free Acids, Polar Solvents.

**SIMILAR PHASES**

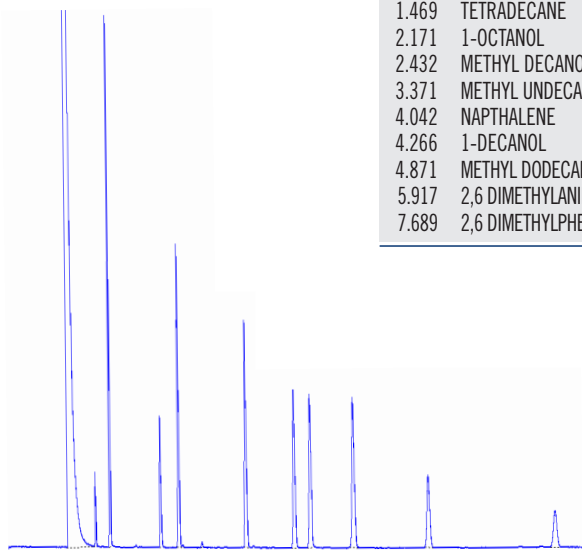
BP-20, CP-Wax 52CB, HP Innowax,  
Stabilwax, Supelcowax-10.

## COLUMN PERFORMANCE TEST MIX

PART NO: 920-180.18 SERIAL NO: 995243

**DESCRIPTION:** 20m x 0.18mm x 0.18µF **LIQUID PHASE:** OV-SUPERWAX  
**MAX PROGRAMMED TEMP:** 280°C **MAX ISOTHERMAL TEMP:** 260°C  
**COLUMN TEMP ISOTHERMAL:** 130°C  
**INJECTOR TEMP:** 250°C **FID DETECTOR TEMP:** 300°C  
**CARRIER GAS:** HELIUM **HOLD UP TIME COMPOUND:** METHANE (0.85 min)

.0906	SOLVENT
1.260	2-OCTANONE
1.469	TETRADECANE
2.171	1-OCTANOL
2.432	METHYL DECANOATE
3.371	METHYL UNDECANOATE
4.042	NAPHTHALENE
4.266	1-DECANOL
4.871	METHYL DODECANOATE
5.917	2,6 DIMETHYLANILINE
7.689	2,6 DIMETHYLPHENOL





# FERRULES

(10 PER PACK)

FERRULE SIZE	TUBING SIZE	STYLE	100% GRAPHITE	85% POLYIMIDE 15% GRAPHITE	60% POLYIMIDE 40% GRAPHITE	100% POLYIMIDE	100% PTFE
1/16"	.05mm		GF-05	MS-05	GH-05	HF-05	TF-05
1/16"	.05mm	HP/AGILENT SHORT	GF-05-HP	MS-05-HP	GH-05-HP	HF-050HP	



### QUALITY

Excellent quality. We challenge you to compare any of our ferrules against your current supplier.

### CONDITIONED

All ferrules are thermally conditioned and ready for immediate high temperature GC use.

### ADVANTAGES OF GRAPHITE FERRULES

Our graphite ferrules fit Swagelok® or Parker® fittings. Graphite ferrules are soft and compliant. They will not stick to glass at higher temperatures. These ferrules are ideal for glass to metal connections. The graphite ferrule can be reused if not over tightened.

### ADVANTAGES OF POLYIMIDE FERRULES

Improved mixing techniques for polyimide ferrules allow for better homogenous mixing of graphite and polyimide resin. One can observe this when looking at a polyimide ferrule. The surfaces are very smooth and exhibit a highly polished or highly shined surface. Polyimide ferrules exhibit a lower coefficient of expansion than other polyimide resins, therefore, reducing the tendency of the column nuts loosening in the heated GC ovens.

### ADVANTAGES OF PTFE FERRULES

The PTFE ferrules are a one piece design and require no back ferrule. These ferrules are completely inert.



Ohio Valley Specialty  
C O M P A N Y

[ovsc.com](http://ovsc.com)

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