

Volatiles

Single & Multi-Component Standards
for GC & GC-MS



이레텍 코리아

경기도 수원시 영통구 영통로 127, 701호

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010-3276-0883

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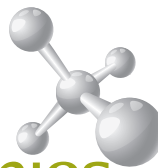
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LABSYSTEM
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Brand name : 랩시스템



SPEXOrganics

Serving the Chromatography Community, One Peak at a Time.™

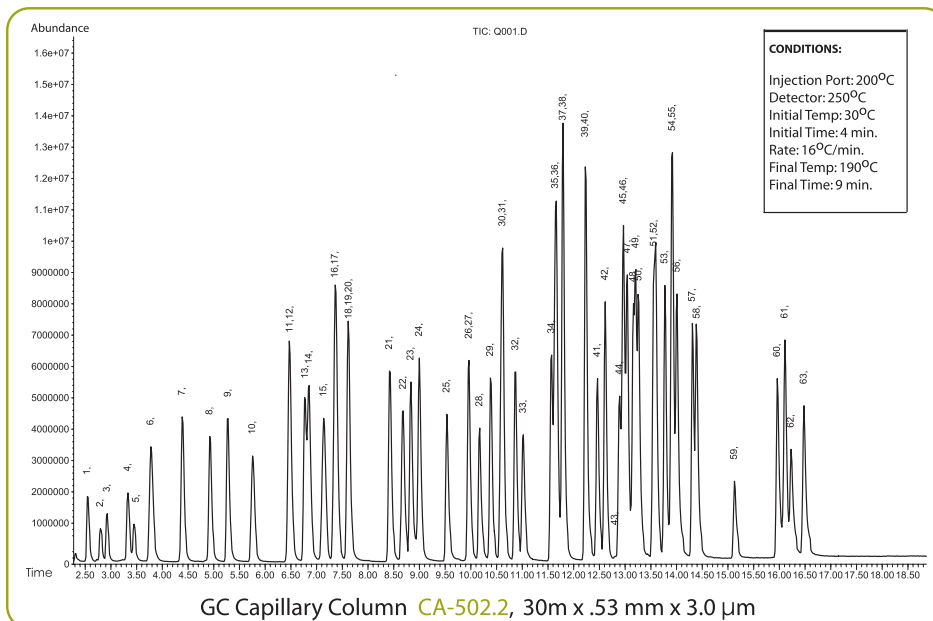
THE 60 BIG MIX

The Most routinely analyzed Volatile Compounds in ONE ampule
 All compounds checked on our GC-MS Systems
 Highest quality at an affordable price

Compound List Each at 1,000 µg/mL

- 1 Dichlorodifluoromethane
- 2 Chloromethane
- 3 Vinyl Chloride
- 4 Bromomethane
- 5 Chloroethane
- 6 Trichlorofluoromethane
- 7 1,1-Dichloroethene
- 8 Methylene Chloride
- 9 trans-1,2-Dichloroethene
- 10 1,1-Dichloroethane
- 11 2,2-Dichloropropane
- 12 cis-1,2-Dichloroethene
- 13 Bromochloromethane
- 14 Chloroform
- 15 1,1,1-Trichloroethane
- 16 1,1-Dichloropropene
- 17 Carbon Tetrachloride
- 18 1,2-Dichloroethane
- 19 1,2-Dichloroethane-d4*
- 20 Benzene
- 21 Trichloroethene
- 22 1,2-Dichloropropane
- 23 Dibromomethane
- 24 Bromodichloromethane
- 25 cis-1,3-Dichloropropene
- 26 Toluene-d8*
- 27 Toluene
- 28 trans-1,3-Dichloropropene
- 29 1,1,2-Trichloroethane
- 30 Tetrachloroethene
- 31 1,3-Dichloropropane
- 32 Dibromochloromethane
- 33 1,2-Dibromoethane
- 34 Chlorobenzene
- 35 1,1,1,2-Tetrachloroethane
- 36 Ethylbenzene
- 37 m-Xylene
- 38 p-Xylene
- 39 o-Xylene
- 40 Styrene
- 41 Bromoform
- 42 Isopropylbenzene
- 43 4-Bromofluorobenzene (BFB)*
- 44 1,1,2,2-Tetrachloroethane
- 45 Bromobenzene
- 46 1,2,3-Trichloropropane
- 47 n-Propylbenzene
- 48 2-Chlorotoluene
- 49 1,3,5-Trimethylbenzene
- 50 4-Chlorotoluene
- 51 tert-Butylbenzene
- 52 1,2,4-Trimethylbenzene
- 53 sec-Butylbenzene
- 54 1,3-Dichlorobenzene
- 55 p-Isopropyltoluene
- 56 1,4-Dichlorobenzene
- 57 n-Butylbenzene
- 58 1,2-Dichlorobenzene
- 59 1,2-Dibromo-3-Chloropropane
- 60 1,2,4-Trichlorobenzene
- 61 Hexachlorobutadiene
- 62 Naphthalene
- 63 1,2,3-Trichlorobenzene

* System Monitoring Compounds



Also Available at:

- | | |
|------------|-------------------------|
| 200 µg/mL | Part #: 60-BIG-MIX-200 |
| 1000 µg/mL | Part #: 60-BIG-MIX |
| 2000 µg/mL | Part #: 60-BIG-MIX-2000 |

Standard

Part #: 60-BIG-MIX
 1 mL ampule at 1000 µg/mL
 in Methanol P & T

Used for GC-MS Analysis of Volatile Organics.

To find out more information call your sales representative at 800-LAB-SPEX x444

IT DOESN'T GET ANY BIGGER THAN THIS!

SPEX CertiPrep®

Volatiles

METHOD 502

EPA method 502.1 is a general analytical method for the monitoring of halogenated, portable VOCs in drinking water and raw water sources by GC and a Hall Detector.

Mix A

15 Certified Components:

Bromoform	trans-1,2-Dichloroethene
Carbon tetrachloride	1,2-Dichloropropane
Chlorobenzene	Methylene chloride
Chloroform	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	Trichloroethene
1,1-Dichloroethene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-AH

1 mL @ 200 µg/mL in Methanol

Catalog#: CLPV-A

Mix B - Purgeable gases

6 Certified Components:

Bromomethane	Dichlorodifluoromethane
Chloroethane	Trichlorofluoromethane
Chloromethane	Vinyl chloride

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5022-BH

1 mL @ 200 µg/mL in Methanol

Catalog#: 5022-B

Need more helpful hints?

A wealth of technical tips and advice from our expert chemists can be found on our Web site:

- Get immediate answers by using our Live Chat function.
- Download a copy of one of our posters or presentations.
- Subscribe to our newsletter.
- View our archive of Ask a Chemist questions – technical questions asked by you and answered by our chemists.
- View our webinars on our YouTube channel.

Did You Know?

SPEX CertiPrep is accredited by A2LA for Organic and Inorganic Certified Reference Materials. In addition to being registered as an ISO 9001 facility, SPEX CertiPrep is accredited by A2LA as complying with the requirements of ISO/IEC 17025 and ISO/IEC Guide 34. Our scope is the **most comprehensive** in the industry.



EPA method 502.2 is a general analytical method for the monitoring of halogenated, purgeable VOCs in drinking water and raw water sources by GC megabore capillary column techniques and Hall and Photoionization (PID) Detectors.

"Big-Mix"

Volatile Organics Mix with 60 Certified Components

60 Certified Components:

Benzene	1,1-Dichloropropene
Bromobenzene	cis-1,3-Dichloropropene
Bromochloromethane	trans-1,3-Dichloropropene
Bromodichloromethane	2,2-Dichloropropane
Bromoform	1,3-Dichloropropane
Bromomethane	Ethylbenzene
n-Butylbenzene	Hexachlorobutadiene
sec-Butylbenzene	Isopropylbenzene
tert-Butylbenzene	p-Isopropyltoluene
Carbon Tetrachloride	Methylene chloride
Chlorobenzene	Naphthalene
Chloroethane	n-Propylbenzene
Chloroform	Styrene
Chloromethane	1,1,1,2-Tetrachloroethane
2-Chlorotoluene	1,1,2,2-Tetrachloroethane
4-Chlorotoluene	Tetrachloroethene
1,2-Dibromo-3-chloropropane	Toluene
Dibromochloromethane	1,2,3-Trichlorobenzene
1,2-Dibromoethane	1,2,4-Trichlorobenzene
Dibromomethane	1,1,1-Trichloroethane
1,2-Dichlorobenzene	1,1,2-Trichloroethane
1,3-Dichlorobenzene	Trichloroethene
1,4-Dichlorobenzene	Trichlorofluoromethane
Dichlorodifluoromethane	1,2,3-Trichloropropane
1,1-Dichloroethane	1,2,4-Trimethylbenzene
1,2-Dichloroethane	1,3,5-Trimethylbenzene
1,1-Dichloroethene	Vinyl chloride
trans-1,2-Dichloroethene	o-Xylene
cis-1,2-Dichloroethene	m-Xylene
1,2-Dichloropropane	p-Xylene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: 60-BIG-MIX

1 mL @ 200 µg/mL in Methanol

Catalog#: 60-BIG-MIX-200

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 60-BIG-MIX-2000

Trihalomethanes

4 Certified Components:

Bromodichloromethane	Chloroform
Bromoform	Dibromochloromethane

1 mL @ 2,000 µg/mL in Methanol

Catalog#: THM-XH

1 mL @ 200 µg/mL in Methanol

Catalog#: THM-X

Internal Standards

1 Certified Component:

1-Chloro-2-fluorobenzene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-935

2 Certified Components:

2-Bromo-1-chloropropane
Fluorobenzene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: 5022-I

Alternate Internal Standards

1 Certified Component:

2-Bromo-1-chloropropane

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-580

1 Certified Component:

1,4-Dichlorobutane

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-1365

1 Certified Component:

Fluorobenzene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-2040

Analyte Mix A**15 Certified Components:**

Bromoform	trans-1,2-Dichloroethene
Carbon tetrachloride	1,2-Dichloropropane
Chlorobenzene	Methylene chloride
Chloroform	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	Trichloroethene
1,1-Dichloroethene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-AH

1 mL @ 200 µg/mL in Methanol

Catalog#: CLPV-A**Mix B - Purgeable Gases****6 Certified Components:**

Bromomethane	Dichlorodifluoromethane
Chloroethane	Trichlorofluoromethane
Chloromethane	Vinyl chloride

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5022-BH

1 mL @ 200 µg/mL in Methanol

Catalog#: 5022-B**Analyte Mix C****22 Certified Components:**

Bromobenzene	1,3-Dichloropropane
Bromochloromethane	1,1-Dichloropropene
Bromodichloromethane	cis-1, 3-Dichloropropene
n-Butylbenzene	trans-1,3-Dichloropropene
2-Chlorotoluene	Ethylbenzene
4-Chlorotoluene	Isopropylbenzene
1,2-Dibromoethane	Styrene
Dibromomethane	1,1,1,2-Tetrachloroethane
1,2-Dichlorobenzene	1,1,1-Trichloroethane
1,3-Dichlorobenzene	1,2,3-Trichloropropane
cis-1,2-Dichloroethene	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-CH**Analyte Mix D****17 Certified Components:**

Benzene	n-Propylbenzene
sec-Butylbenzene	Toluene
tert-Butylbenzene	1,2,3-Trichlorobenzene
1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene
1,4-Dichlorobenzene	1,2,4-Trimethylbenzene
2,2-Dichloropropane	1,3,5-Trimethylbenzene
Hexachlorobutadiene	o-Xylene
p-Isopropyltoluene	m-Xylene
Naphthalene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-DH**Volatile Organics Combination Mix
Analyte Mixes A, C & D**

Includes all analytes in Mixes A, C and D that also appear on this page.

54 Certified Components:

Benzene	cis-1,3-Dichloropropene
Bromobenzene	trans-1,3-Dichloropropene
Bromochloromethane	2,2-Dichloropropane
Bromodichloromethane	1,3-Dichloropropane
Bromoform	Ethylbenzene
n-Butylbenzene	Hexachlorobutadiene
tert-Butylbenzene	Isopropylbenzene
sec-Butylbenzene	p-Isopropyltoluene
Carbon Tetrachloride	Methylene Chloride
Chlorobenzene	Naphthalene
Chloroform	n-Propylbenzene
2-Chlorotoluene	Styrene
4-Chlorotoluene	1,1,1,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,2-Dibromoethane	Toluene
Dibromomethane	1,2,3-Trichlorobenzene
1,2-Dichlorobenzene	1,2,4-Trichlorobenzene
1,3-Dichlorobenzene	1,1,1-Trichloroethane
1,4-Dichlorobenzene	1,1,2-Trichloroethane
1,1-Dichloroethane	Trichloroethene
1,2-Dichloroethane	1,2,3-Trichloropropane
1,1-Dichloroethene	1,2,4-Trimethylbenzene
trans-1,2-Dichloroethene	1,3,5-Trimethylbenzene
cis-1,2-Dichloroethene	o-Xylene
1,2-Dichloropropane	m-Xylene
1,1-Dichloropropene	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-VCX

1 mL @ 200 µg/mL in Methanol

Catalog#: 5242-VCX-200

1 mL @ 2,000 µg/mL in Methanol

Contains the same analytes as 5242-VCX, but with meta- and para-xylene at 1,000 µg/mL.

Catalog#: HICAL-VOC

METHODS 504

EPA method 504 is an analytical method for the monitoring of 1,2-Dibromoethane (EDB), 1,2-Dibromo-3-Chloropropane (DBCP), and 1,2,3-Trichloropropane (123TCP) in Water by Microextraction and either GC-ECD or GC-MS techniques.

Method 504 Analytes

2 Certified Components:

1,2 Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (EDB)

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 504-AH

Method 504.1 Analytes

3 Certified Components:

1,2 Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (EDB)
1,2,3-Trichloropropane

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5041-AH

METHOD 524

WITH REVISION 4 COMPOUNDS

EPA Method 524.3 is a GC-MS method for the analysis of purgeable VOCs in finished drinking water. Analytes added to Method 524.3 in Revision 4 are supplied in a 24-component mix.

Method 524.3 Mix A

7 Certified Components:

Bromomethane	Dichlorodifluoromethane
1,3-Butadiene	Trichlorofluoromethane
Chlorodifluoromethane	Vinyl Chloride
Chloromethane	

1mL @ 2,000 µg/mL in Methanol

Catalog#: 5243-G

Method 524.3 Supplemental Mix

8 Certified Components:

1,3-Butadiene	t-Amyl ethyl ether (TAEE)
Chlorodifluoromethane	t-Amyl methyl ether (TAME)
Diisopropyl ether (DIPE)	t-Butyl alcohol (TBA)
Methyl acetate	t-Butyl ethyl ether (ETBE)

1mL @ 2,000 µg/mL in Methanol

Catalog#: 5243-A

UCMR-3

This GC-MS standard (EPA 524.3) covers the seven volatile organic compounds included in the Unregulated Contaminant Monitoring Rule 3 (UCMR3), which requires monitoring of all public drinking water systems with 10,000 or more customers.

Components	Concentration µg/mL
Bromomethane	2000
Chloromethane	2000
1,3-Butadiene	1000
Chlorodifluoromethane	800
Bromochloromethane	600
sec-Butylbenzene	400
1,1-Dichloroethane	300
1,2,3-Trichloropropane	300
n-Propylbenzene	300

Volume: 1 mL

Catalog#: UCMR-3

Did You Know?

On SPEX CertiPrep's website you can search by CAS number or component name on our site search tool and on our Custom Standards Request Form for singles and mixes.

Analyte Mix A**15 Certified Components:**

Bromoform	trans-1,2-Dichloroethene
Carbon Tetrachloride	1,2-Dichloropropane
Chlorobenzene	Methylene chloride
Chloroform	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	Trichloroethene
1,1-Dichloroethene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-AH

1 mL @ 200 µg/mL in Methanol

Catalog#: CLPV-A**Analyte Mix C****22 Certified Components:**

Bromobenzene	1,3-Dichloropropane
Bromochloromethane	1,1-Dichloropropene
Bromodichloromethane	cis-1, 3-Dichloropropene
n-Butylbenzene	trans-1,3-Dichloropropene
2-Chlorotoluene	Ethylbenzene
4-Chlorotoluene	Isopropylbenzene
1,2-Dibromoethane	Styrene
Dibromomethane	1,1,1,2-Tetrachloroethane
1,2-Dichlorobenzene	1,1,1-Trichloroethane
1,3-Dichlorobenzene	1,2,3-Trichloropropane
cis-1,2-Dichloroethene	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-CH**Method 524.2 Mix D****17 Certified Components:**

Benzene	n-Propylbenzene
sec-Butylbenzene	Toluene
tert-Butylbenzene	1,2,3-Trichlorobenzene
1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene
1,4-Dichlorobenzene	1,2,4-Trimethylbenzene
2,2-Dichloropropane	1,3,5-Trimethylbenzene
Hexachlorobutadiene	o-Xylene
p-Isopropyltoluene	m-Xylene
Naphthalene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-DH**Volatile Organics Combination Mix Analyte Mixes A, C & D**

Includes all analytes in Mixes A, C and D that also appear on this page.

54 Certified Components:

Benzene	cis-1,3-Dichloropropene
Bromobenzene	trans-1,3-Dichloropropene
Bromochloromethane	2,2-Dichloropropane
Bromodichloromethane	1,3-Dichloropropane
Bromoform	Ethylbenzene
n-Butylbenzene	Hexachlorobutadiene
tert-Butylbenzene	Isopropylbenzene
sec-Butylbenzene	p-Isopropyltoluene
Carbon Tetrachloride	Methylene Chloride
Chlorobenzene	Naphthalene
Chloroform	n-Propylbenzene
2-Chlorotoluene	Styrene
4-Chlorotoluene	1,1,1,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,2-Dibromoethane	Toluene
Dibromomethane	1,2,3-Trichlorobenzene
1,2-Dichlorobenzene	1,2,4-Trichlorobenzene
1,3-Dichlorobenzene	1,1,1-Trichloroethane
1,4-Dichlorobenzene	1,1,2-Trichloroethane
1,1-Dichloroethane	Trichloroethene
1,2-Dichloroethane	1,2,3-Trichloropropane
1,1-Dichloroethene	1,2,4-Trimethylbenzene
trans-1,2-Dichloroethene	1,3,5-Trimethylbenzene
cis-1,2-Dichloroethene	o-Xylene
1,2-Dichloropropane	m-Xylene
1,1-Dichloropropene	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-VCX

1 mL @ 200 µg/mL in Methanol

Catalog#: 5242-VCX-200

1 mL @ 200 µg/mL in Methanol

Catalog#: 5242-VCX-200G

Contains the same analytes as 5242-VCX-200, plus the following additional analytes:

Bromomethane	Dichlorodifluoromethane
Chloroethane	Trichlorofluoromethane
Chloromethane	Vinyl chloride

1 mL @ 2,000 µg/mL in Methanol

Catalog#: HICAL-VOC

Contains the same analytes as 5242-VCX, but with meta- and para-xylene each at 1,000 µg/mL.

Method 524.2 Revision 4

24 Certified Components:

Acetone	2-Hexanone
Acrylonitrile	Methyl Acrylate
Allyl chloride	Methacrylonitrile
2-Butanone	Iodomethane
Carbon disulfide	Methylmethacrylate
Chloroacetonitrile	4-Methyl-2-pentanone
1-Chlorobutane	methyl tert-butyl ether
trans-1,4-Dichloro-2-butene	Nitrobenzene
1,1-Dichloropropanone	2-Nitropropane
Diethyl ether	Pentachloroethane
Ethyl methacrylate	Propionitrile
Hexachloroethane	Tetrahydrofuran

1 mL @ 200 µg/mL in Methanol

Catalog#: 5242-R4200

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-R4

Fortification Solution

3 Certified Components:

4-Bromofluorobenzene
1,2-Dichlorobenzene-d ₄
Fluorobenzene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: 5242-F

GC-MS Tuning Standard (BFB)

1 Certified Component:

4-Bromofluorobenzene

1 mL @ 2,500 µg/mL in Methanol

Catalog#: CLPV-TH

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-550

Method 524.3 Mix B

69 Certified Components:

Allyl Chloride	cis-1,3-Dichloropropene
t-Amyl ethyl ether (TAEE)	trans-1,3-Dichloropropene
t-Amyl methyl ether (TAME)	Diethyl Ether
Benzene	Diisopropyl ether (DIPE)
Bromobenzene	Ethylbenzene
Bromochloromethane	Ethyl Methacrylate
Bromodichloromethane	Hexachlorobutadiene
Bromoform	Hexachloroethane
t-Butyl alcohol	Isopropylbenzene
n-Butylbenzene	4-Isopropyltoluene
sec-Butylbenzene	Methyl acetate
tert-Butylbenzene	Methyl-t-butyl Ether
t-Butyl ethyl ether (ETBE)	Methylene Chloride
Carbon Disulfide	Naphthalene
Carbon Tetrachloride	Pentachloroethane
Chlorobenzene	n-Propylbenzene
Chloroform	Styrene
2-Chlorotoluene	1,1,1,2-Tetrachloroethane
4-Chlorotoluene	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,2-Dibromo-3-Chloropropane	Tetrahydrofuran
1,2-Dibromoethane	Toluene
Dibromomethane	1,2,3-Trichlorobenzene
1,2-Dichlorobenzene	1,2,4-Trichlorobenzene
1,3-Dichlorobenzene	1,1,1-Trichloroethane
1,4-Dichlorobenzene	1,1,2-Trichloroethane
1,1-Dichloroethane	Trichloroethene
1,2-Dichloroethane	Trichlorofluoromethane
1,1-Dichloroethene	1,2,3-Trichloropropane
cis-1,2-Dichloroethene	1,2,4-Trimethylbenzene
trans-1,2-Dichloroethene	1,3,5-Trimethylbenzene
1,2-Dichloropropane	o-Xylene
1,3-Dichloropropane	m-Xylene
2,2-Dichloropropane	p-Xylene
1,1-Dichloropropene	

1mL @ 2,000 µg/mL in Methanol

Catalog#: 5243-VCM

Helpful Hint:

Special packaging needs?

Visit our web site for a sampling of our capabilities, or call us at **1-800-LAB-SPEX ext. 444.**

Internal Standard**1 Certified Component:**

Fluorobenzene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-I**Surrogate Standard****2 Certified Components:**

4-Bromofluorobenzene

1,2-Dichlorobenzene-d₄

1 mL @ 1,000 µg/mL in Methanol

Catalog#: 5242-S**Surrogate****3 Certified Components:**

4-Bromofluorobenzene

1,2-Dichlorobenzene-d₄Methyl-t-butyl-ether-d₃

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5243-S**Internal Standard****3 Certified Components:**Chlorobenzene-d₅

1,4-Difluorobenzene

1,4-Dichlorobenzene-d₄

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5243-I**524.3 IS Singles****1 Certified Component:**

1,4-Difluorobenzene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-1540**1 Certified Component:**Chlorobenzene-d₅

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-815**1 Certified Component:**1,4-Dichlorobenzene-d₄

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-1310**METHOD 551**

EPA Method 551 is an analytical method for the determination of chlorinated disinfection byproducts, chlorinated solvents and halogenated pesticides & herbicides in drinking water and raw source water using MTBE extraction and GC-ECD techniques.

Chlorinated Disinfection By-Products, Solvents And Trihalomethanes Combination Mix**18 Certified Components:**

Bromodichloromethane	1,1-Dichloro-2-propanone
Bromoform	Tetrachloroethene
Carbon tetrachloride	Trichloroacetonitrile
Chloroform	1,1,1-Trichloroethane
Chloropicrin	1,1,2-Trichloroethane
Dibromoacetonitrile	Trichloroethene
Dibromochloromethane	1,2,3-Trichloropropane
1,2-Dibromoethane (EDB)	1,1,1-Trichloro-2-propanone
Dichloroacetonitrile	
1,2-Dibromo-3-chloropropane (DBCP)	

1 mL @ 2,000 µg/mL in Acetone

Catalog#: 5511-A**Halogenated Pesticides and Herbicides Mix****16 Certified Components:**

Alachlor	Heptachlor epoxide
Atrazine	Hexachlorobenzene
Bromacil	Hexachlorocyclopentadiene
Cyanazine	Lindane (g-BHC)
Endrin	Metolachlor
Endrin aldehyde	Metribuzin
Endrin ketone	Methoxychlor
Heptachlor	Trifluralin

1 mL @ 2,000 µg/mL in Acetone

Catalog#: 5511-PH**Surrogate Standard****1 Certified Component:**

Decafluorobiphenyl

1 mL @ 1,000 µg/mL in Acetone

Catalog#: S-1103**Internal Standard****1 Certified Component:**

Bromofluorobenzene (BFB)

1 mL @ 10,000 µg/mL in Acetone

Catalog#: 5511-I

Bromochloroacetonitrile Single

1 Certified Component:

Bromochloroacetonitrile

1 mL @ 1,000 ug/mL in Methanol

Catalog#: S-532

Laboratory Performance Check Solution

7 Certified Components:

	$\mu\text{g/mL}$		$\mu\text{g/mL}$
Alaclor	83	Endrin	30
g-BHC (Lindane)	0.2	Hexachlorocyclopentadiene	20
Bromacil	83	Trichloroethene	30
Bromodichloromethane	30		

1 mL in Methyl tert-butyl ether

Catalog#: 5511-PC

Custom Standards for Method 551.1

If you're not running the entire analyte list for method 551.1, custom standards may be the most cost-effective way to simplify your calibrations. Submit your custom design request at www.spexcertiprep.com/customorganics.

METHOD 601

EPA method 601 is a general analytical method for the monitoring of halogenated VOCs in municipal and industrial wastewater by GC with a Hall detector.

Volatile Organics Combination Mix

23 Certified Components:

Bromoform	trans-1,2-Dichloroethene
Carbon Tetrachloride	1,1-Dichloroethene
Chlorobenzene	1,2-Dichloropropane
2-Chloroethylvinyl ether	cis-1,3-Dichloropropene
Chloroform	trans-1,3-Dichloropropene
Bromodichloromethane	Methylene chloride
Dibromochloromethane	1,1,2,2-Tetrachloroethane
1,2-Dichlorobenzene	Tetrachloroethene
1,3-Dichlorobenzene	1,1,1-Trichloroethane
1,4-Dichlorobenzene	1,1,2-Trichloroethane
1,1-Dichloroethane	Trichloroethene
1,2-Dichloroethane	

1 mL @ 200 $\mu\text{g/mL}$ in Methanol

Catalog#: 601-A

Mix B - Purgeable gases

6 Certified Components:

Bromomethane	Dichlorodifluoromethane
Chloroethane	Trichlorofluoromethane
Chloromethane	Vinyl chloride

1 mL @ 2,000 $\mu\text{g/mL}$ in Methanol

Catalog#: 5022-BH

1 mL @ 200 $\mu\text{g/mL}$ in Methanol

Catalog#: 5022-B

Surrogate/Internal Standard

3 Certified Components:

Bromochloromethane
2-Bromo-1-chloropropane
1,4-Dichlorobutane

1 mL @ 20,000 $\mu\text{g/mL}$ in Methanol

Catalog#: 601-I

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METHOD 602

EPA method 602 is a general analytical method for the monitoring of halogenated aromatic compounds in municipal and industrial wastewater by GC-PID.

Purgeable Aromatics for Gasoline Identification**11 Certified Components:**

Benzene	Methyl tert-butyl ether
Chlorobenzene	Toluene
1,2-Dichlorobenzene	o-Xylene
1,3-Dichlorobenzene	m-Xylene
1,4-Dichlorobenzene	p-Xylene
Ethylbenzene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: P-GAS

BTEX Standard**6 Certified Components:**

Benzene	m-Xylene
Ethylbenzene	o-Xylene
Toluene	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: BTEX-H

1 mL @ 200 µg/mL in Methanol

Catalog#: BTEX

Alternate BTEX Standard**6 Certified Components:**

	µg/mL		µg/mL
Benzene	2,000	m-Xylene	1,000
Ethylbenzene	2,000	o-Xylene	2,000
Toluene	2,000	p-Xylene	1,000

1 mL in Methanol

Catalog#: BTEX-2-1H

Internal/Surrogate Standard**1 Certified Component:**

α,α,α-Trifluorotoluene

1 mL @ 200 µg/mL in Methanol

Catalog#: 602-I

METHOD 603

EPA method 603 is a general analytical method for the separation of Acrolein and Acrylonitrile in municipal and industrial wastewater by GC-FID.

Acrolein and Acrylonitrile in Water**2 Certified Components:**

Acrolein
Acrylonitrile

1 mL @ 2,000 µg/mL in DI Water

Catalog#: 603-X

Acrolein is more stable in water.

Acrolein and Acrylonitrile in Methanol Purge & Trap**2 Certified Components:**

Acrolein
Acrylonitrile

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 603-XM

Helpful Hint:

Acrolein is more stable in water at pH 4-5.

METHOD 624

EPA method 624 is a general analytical method for the monitoring of VOCs in municipal and industrial wastewater by GC-MS.

Mix A

15 Certified Components:

Bromoform	trans-1,2-Dichloroethene
Carbon tetrachloride	1,2-Dichloropropane
Chlorobenzene	Methylene chloride
Chloroform	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	Trichloroethene
1,1-Dichloroethene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-AH

1 mL @ 200 µg/mL in Methanol

Catalog#: CLPV-A

Mix B - Purgeable gases

5 Certified Components:

Bromomethane	Trichlorofluoromethane
Chloroethane	Vinyl chloride
Chloromethane	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 624-BH

1 mL @ 200 µg/mL in Methanol

Catalog#: 624-B

Mix C

8 Certified Components:

Benzene	trans-1,3-Dichloropropene
Bromodichloromethane	Ethylbenzene
2-Chloroethylvinyl ether	Toluene
cis-1,3-Dichloropropene	1,1,1-Trichloroethane

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 624-CH

1 mL @ 200 µg/mL in Methanol

Catalog#: 624-C

Mix D

3 Certified Components:

1,2-Dichlorobenzene	1,4-Dichlorobenzene
1,3-Dichlorobenzene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 624-DH

1 mL @ 200 µg/mL in Methanol

Catalog#: 624-D

Volatile Organics Combination Mix Analyte mixes A, C & D

Includes all analytes in Mixes A, C and D that also appear on this page.

26 Certified Components:

Benzene	1,1-Dichloroethene
Bromodichloromethane	trans-1,2-Dichloroethene
Bromoform	1,2-Dichloropropane
Carbon Tetrachloride	cis-1,3-Dichloropropene
2-Chloroethylvinyl ether	trans-1,3-Dichloropropene
Chloroform	Ethylbenzene
Chlorobenzene	Methylene chloride
Dibromochloromethane	Tetrachloroethene
1,4-Dichlorobenzene	1,1,2,2-Tetrachloroethane
1,3-Dichlorobenzene	Toluene
1,2-Dichlorobenzene	1,1,1-Trichloroethane
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	Trichloroethene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 624-A

Internal Standard

3 Certified Components:

Bromochloromethane
2-Bromo-1-chloropropane
1,4-Difluorobenzene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: 624-I

Surrogate Standard

3 Certified Components:

4-Bromofluorobenzene
Fluorobenzene
Pentafluorobenzene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: 624-S

624 Alternate Internal/Surrogate Standard Singles

Component @ 1,000 µg/mL:	Matrix	Catalog#
Benzene-d6	Methanol	S-0406
4-Bromofluorobenzene	Methanol	S-550
1,2-Dichloroethane-d4	Methanol	S-1385
1,4-Dichlorobutane	Methanol	S-1365
Ethyl-d5-benzene	Methanol	S-1924
Ethylbenzene-d10	Methanol	S-1941

METHOD 8011

EPA method 8011 is an analytical method for the monitoring of EDB and DBCP in drinking water and ground water by GC-MS.

EDB/DBCP**2 Certified Components:**

1,2 Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (EDB)

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 504-AH

METHOD 8015

EPA method 8015 is a general analytical method for the monitoring of certain non-halogenated VOCs and SVOCs by GC-FID.

Alcohols Mix**9 Certified Components:**

Allyl alcohol	Isobutyl alcohol
1-Butanol	Isopropyl alcohol
t-Butyl alcohol	Methanol
Ethanol	1-Propanol
Ethylene glycol	

1 mL @ 2,000 µg/mL in water

Catalog#: 8015B-A

Analyte Mix B**16 Certified Components:**

Acetone	Methyl ethyl ketone
Acrylamide	Methyl isobutyl ketone
Acetonitrile	N-Nitroso-di-n-butylamine
Crotonaldehyde	2-Pentanone
Diethyl ether	2-Picoline
1,4-Dioxane	Propionitrile
Ethyl acetate	Pyridine
Ethylene oxide	o-Toluidine

1 mL @ 2,000 µg/mL in water

Catalog#: 8015B-B

New Part # 8015-OX**5 Certified Components:**

t-Amyl methyl ether (TAME)	Ethyl tert-butyl ether (ETBE)
t-Butyl alcohol	Methyl tert-butyl ether (MTBE)
Diisopropyl ether (DIPE)	

1mL @ 2,000 µg/mL in Methanol

Catalog#: 8015-OX

Acrolein and Acrylonitrile**2 Certified Components:**

Acrolein
Acrylonitrile

1 mL @ 2,000 µg/mL in water

Catalog#: 603-X

8015 Singles

Component @ 1,000 ug/mL:	Matrix	Catalog#
t-Amyl alcohol (TAA)	Methanol	S-260
t-Amyl ethyl ether (TAEE)	Methanol	S-4459
Paraldehyde	Methanol	S-2913
Triethylamine	Methanol	S-3702
Reference Gasoline Range Organics	Methanol	GRO-1000
Reference Diesel Range Organics	Methanol	DRO-1000

Internal Standard

3 Certified Components:

2-Chloroacrylonitrile
Hexafluoro-2-propanol
Hexafluoro-2-methyl-2-propanol

1 mL @ 5,000 µg/mL in water

Catalog#: 8015B-I

METHOD 8021

EPA method 8021 is a general analytical method for the monitoring VOCs by GC megabore capillary column techniques and Hall and Photoionization (PID) Detectors.

8021 Singles

Component @ 1,000 ug/mL:	Matrix	Catalog#
Allyl chloride	Methanol	S-210
Benzyl chloride	Methanol	S-465
Bromoacetone	Methanol	S-522
2-Chloroethanol	Methanol	S-847
2-Chloroethyl vinyl ether	Methanol	S-855
Chloromethyl methyl ether	Methanol	S-877
Chloroprene	Methanol	S-930
Epichlorohydrin	Methanol	S-1860

8021 Surrogate

1 Certified Component:

4-Bromochlorobenzene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-534

1 Certified Component:

1,4-Dichlorobutane

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-1365

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Volatile Organics Combination Mix**54 Certified Components:**

Benzene	cis-1,3-Dichloropropene
Bromobenzene	trans-1,3-Dichloropropene
Bromochloromethane	2,2-Dichloropropane
Bromodichloromethane	1,3-Dichloropropane
Bromoform	Ethylbenzene
n-Butylbenzene	Hexachlorobutadiene
tert-Butylbenzene	Isopropylbenzene
sec-Butylbenzene	p-Isopropyltoluene
Carbon Tetrachloride	Methylene Chloride
Chlorobenzene	Naphthalene
Chloroform	n-Propylbenzene
2-Chlorotoluene	Styrene
4-Chlorotoluene	1,1,1,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,2-Dibromoethane	Toluene
Dibromomethane	1,2,3-Trichlorobenzene
1,2-Dichlorobenzene	1,2,4-Trichlorobenzene
1,3-Dichlorobenzene	1,1,1-Trichloroethane
1,4-Dichlorobenzene	1,1,2-Trichloroethane
1,1-Dichloroethane	Trichloroethene
1,2-Dichloroethane	1,2,3-Trichloropropane
1,1-Dichloroethene	1,2,4-Trimethylbenzene
trans-1,2-Dichloroethene	1,3,5-Trimethylbenzene
cis-1,2-Dichloroethene	o-Xylene
1,2-Dichloropropane	m-Xylene
1,1-Dichloropropene	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-VCX

1 mL @ 200 µg/mL in Methanol

Catalog#: 5242-VCX-200**Mix A****10 Certified Components:**

Benzene	Ethylbenzene
Chlorobenzene	Toluene
1,2-Dichlorobenzene	o-Xylene
1,3-Dichlorobenzene	m-Xylene
1,4-Dichlorobenzene	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 8020-A**Mix B - Purgeable Gases****6 Certified Components:**

Bromomethane	Dichlorodifluoromethane
Chloroethane	Trichlorofluoromethane
Chloromethane	Vinyl chloride

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5022-BH

1 mL @ 200 µg/mL in Methanol

Catalog#: 5022-B**Method 8021B Analytes (Purge & Trap)****4 Certified Components:**

Allyl chloride
2-Chloroethylvinyl ether
Bis-(2-chloroisopropyl)ether
Chloroprene(2-Chloro-1,3-butadiene)

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 8021B-XA**Method 8021B Analytes (Direct Injection)****6 Certified Components:**

Benzyl Chloride
1-Bromo-2-propanone
(Bromoacetone)
Chloromethyl methyl ether
2-Chloroethanol
1,3-Dichloro-2-propanol
Epichlorhydrin

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 8021B-XB**Internal Standard****1 Certified Component:**

α,α,α-Trifluorotoluene

1 mL @ 200 µg/mL in Methanol

Catalog#: 602-I**Internal Standard****2 Certified Components:**

2-Bromo-1-chloropropane
Fluorobenzene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: 5022-I**Surrogate Standard****2 Certified Components:**

Bromochlorobenzene
1,4-Dichlorobutane

1 mL @ 1,000 µg/mL in Methanol

Catalog#: 8021B-S

METHOD 8260

EPA method 8263 is a general analytical method for the monitoring VOCs by GC-MS.

"Big-Mix"

Volatile Organics Mix with 60 Certified Components

60 Certified Components:

Benzene	1,1-Dichloropropene
Bromobenzene	cis-1,3-Dichloropropene
Bromochloromethane	trans-1,3-Dichloropropene
Bromodichloromethane	2,2-Dichloropropane
Bromoform	1,3-Dichloropropane
Bromomethane	Ethylbenzene
n-Butylbenzene	Hexachlorobutadiene
sec-Butylbenzene	Isopropylbenzene
tert-Butylbenzene	p-Isopropyltoluene
Carbon Tetrachloride	Methylene chloride
Chlorobenzene	Naphthalene
Chloroethane	n-Propylbenzene
Chloroform	Styrene
Chloromethane	1,1,1,2-Tetrachloroethane
2-Chlorotoluene	1,1,2,2-Tetrachloroethane
4-Chlorotoluene	Tetrachloroethene
1,2-Dibromo-3-chloropropane	Toluene
Dibromochloromethane	1,2,3-Trichlorobenzene
1,2-Dibromoethane	1,2,4-Trichlorobenzene
Dibromomethane	1,1,1-Trichloroethane
1,2-Dichlorobenzene	1,1,2-Trichloroethane
1,3-Dichlorobenzene	Trichloroethene
1,4-Dichlorobenzene	Trichlorofluoromethane
Dichlorodifluoromethane	1,2,3-Trichloropropane
1,1-Dichloroethane	1,2,4-Trimethylbenzene
1,2-Dichloroethane	1,3,5-Trimethylbenzene
1,1-Dichloroethene	Vinyl chloride
trans-1,2-Dichloroethene	o-Xylene
cis-1,2-Dichloroethene	m-Xylene
1,2-Dichloropropane	p-Xylene

1 mL @ 1,000 µg/mL in Methanol

Catalog#: 60-BIG-MIX

1 mL @ 200 µg/mL in Methanol

Catalog#: 60-BIG-MIX-200

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 60-BIG-MIX-2000

Mix A

15 Certified Components:

Bromoform	trans-1,2-Dichloroethene
Carbon tetrachloride	1,2-Dichloropropane
Chlorobenzene	Methylene chloride
Chloroform	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	Trichloroethene
1,1-Dichloroethene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-AH

1 mL @ 200 µg/mL in Methanol

Catalog#: CLPV-A

Mix B - Purgeable Gases

6 Certified Components:

Bromomethane	Dichlorodifluoromethane
Chloroethane	Trichlorofluoromethane
Chloromethane	Vinyl chloride

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5022-BH

1 mL @ 200 µg/mL in Methanol

Catalog#: 5022-B

Mix C

22 Certified Components:

Bromobenzene	1,3-Dichloropropane
Bromochloromethane	1,1-Dichloropropene
Bromodichloromethane	cis-1,3-Dichloropropene
n-Butylbenzene	trans-1,3-Dichloropropene
2-Chlorotoluene	Ethylbenzene
4-Chlorotoluene	Isopropylbenzene
1,2-Dibromoethane	Styrene
Dibromomethane	1,1,1,2-Tetrachloroethane
1,2-Dichlorobenzene	1,1,1-Trichloroethane
1,3-Dichlorobenzene	1,2,3-Trichloropropane
cis-1,2-Dichloroethene	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-CH

Mix D

17 Certified Components:

Benzene	n-Propylbenzene
sec-Butylbenzene	Toluene
tert-Butylbenzene	1,2,3-Trichlorobenzene
1,2-Dibromo-3-chloropropane	1,2,4-Trichlorobenzene
1,4-Dichlorobenzene	1,2,4-Trimethylbenzene
2,2-Dichloropropane	1,3,5-Trimethylbenzene
Hexachlorobutadiene	o-Xylene
p-Isopropyltoluene	m-Xylene
Naphthalene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-DH

Volatile Organics Combination Mix

Contains all analytes in Mixes A, C and D that appear on the previous page.

54 Certified Components:

Benzene	cis-1,3-Dichloropropene
Bromobenzene	trans-1,3-Dichloropropene
Bromochloromethane	2,2-Dichloropropane
Bromodichloromethane	1,3-Dichloropropane
Bromoform	Ethylbenzene
n-Butylbenzene	Hexachlorobutadiene
tert-Butylbenzene	Isopropylbenzene
sec-Butylbenzene	p-Isopropyltoluene
Carbon Tetrachloride	Methylene Chloride
Chlorobenzene	Naphthalene
Chloroform	n-Propylbenzene
2-Chlorotoluene	Styrene
4-Chlorotoluene	1,1,1,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,2-Dibromoethane	Toluene
Dibromomethane	1,2,3-Trichlorobenzene
1,2-Dichlorobenzene	1,2,4-Trichlorobenzene
1,3-Dichlorobenzene	1,1,1-Trichloroethane
1,4-Dichlorobenzene	1,1,2-Trichloroethane
1,1-Dichloroethane	Trichloroethene
1,2-Dichloroethane	1,2,3-Trichloropropane
1,1-Dichloroethene	1,2,4-Trimethylbenzene
trans-1,2-Dichloroethene	1,3,5-Trimethylbenzene
cis-1,2-Dichloroethene	o-Xylene
1,2-Dichloropropane	m-Xylene
1,1-Dichloropropene	p-Xylene

54 Certified Components:

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5242-VCX

54 Certified Components:

1 mL @ 200 µg/mL in Methanol

Catalog#: 5242-VCX-200

Alternate combination blend, V53-524, contains all analytes in 5242-VCX except bromochloromethane and is useful for those who use the CLP internal standards.

53 Certified Components:

1 mL @ 2,000 µg/mL in Methanol

Catalog#: V53-524

"Big-Mix"

Volatile Organics Mix with 76 Certified Components

76 Certified Components:

Acetonitrile	trans-1,3-Dichloropropene
Acrylonitrile	1,4-Dioxane
Allyl chloride	Ether
Benzene	Ethylbenzene
Bromobenzene	Ethyl methacrylate
Bromochloromethane	Hexachlorobutadiene
Bromodichloromethane	Iodomethane
Bromoform	Isopropylbenzene
n-Butylbenzene	p-Isopropyltoluene
sec-Butylbenzene	Methacrylonitrile
tert-Butylbenzene	Methyl acrylate
Carbon disulfide	Methyl methacrylate
Carbon tetrachloride	Methylene chloride
Chlorobenzene	2-Methyl-1-propanol
2-Chloro-1,3-butadiene	Naphthalene
2-Chloroethanol	Nitrobenzene
Chloroform	2-Nitropropane
2-Chlorotoluene	Pentachloroethane
4-Chlorotoluene	Propionitrile
Dibromochloromethane	n-Propylbenzene
1,2-Dibromo-3-chloropropane	Styrene
1,2-Dibromoethane	1,1,1,2-Tetrachloroethane
Dibromomethane	1,1,2,2-Tetrachloroethane
1,2-Dichlorobenzene	Tetrachloroethene
1,3-Dichlorobenzene	Tetrahydrofuran
1,4-Dichlorobenzene	Toluene
cis-1,4-Dichloro-2-butene	1,2,3-Trichlorobenzene
trans-1,4-Dichloro-2-butene	1,2,4-Trichlorobenzene
1,1-Dichloroethane	1,1,1-Trichloroethane
1,2-Dichloroethane	1,1,2-Trichloroethane
1,1-Dichloroethene	Trichloroethene
cis-1,2-Dichloroethene	1,2,3-Trichloropropane
trans-1,2-Dichloroethene	1,1,2-Trichlorotrifluoroethane
1,2-Dichloropropane	1,2,4-Trimethylbenzene
1,3-Dichloropropane	1,3,5-Trimethylbenzene
2,2-Dichloropropane	m-Xylene
1,1-Dichloropropene	o-Xylene
cis-1,3-Dichloropropene	p-Xylene

1mL @ 2,000 µg/mL in Methanol

Catalog#: 8260-BIG-MIX

8260-KET

4 Certified Components:

Acetone 2-Hexanone
2-Butanone Methyl isobutyl ketone

1 mL @ 5,000 µg/mL in Methanol:DIH₂O (9:1)

Catalog#: 8260-KET

8260 Volatile Organics Combination Mix

26 Certified Components:

Benzene	Ethylbenzene
Bromodichloromethane	Methylene chloride
Bromoform	Styrene
Carbon Tetrachloride	1,1,2,2-Tetrachloroethane
Chlorobenzene	Tetrachloroethene
Chloroform	Toluene
Dibromochloromethane	1,1,1-Trichloroethane
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	trans-1,2-Dichloroethene
1,1-Dichloroethene	Trichloroethene
1,2-Dichloropropane	o-Xylene
cis-1,3-Dichloropropene	m-Xylene
trans-1,3-Dichloropropene	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 8240-25

Volatile 3 Matrix Spike

5 Certified Components:

Benzene	Toluene
Chlorobenzene	Trichloroethene
1,1-Dichloroethene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-MH

GC-MS Tuning Standard (BFB)

1 Certified Component:

4-Bromofluorobenzene

1 mL @ 2,500 µg/mL in Methanol

Catalog#: CLPV-TH

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-550

Surrogate Standard

3 Certified Components:

4-Bromofluorobenzene
Dibromofluoromethane
Toluene-d₈

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 8260-S

8240 Surrogate Standard

3 Certified Components:

4-Bromofluorobenzene
1,2-Dichloroethane-d₄
Toluene-d₈

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-SH

Alternate Four-Component Surrogate Standard

4 Certified Components:

4-Bromofluorobenzene
Dibromofluoromethane
1,2-Dichloroethane-d₄
Toluene-d₈

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 8260A-S

Internal Standard

4 Certified Components:

Chlorobenzene-d₅
1,4-Dichlorobenzene-d₄
1,4-Difluorobenzene
Pentafluorobenzene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 8260-I

Internal Standard

3 Certified Components:

Chlorobenzene-d₅
1,4-Dichlorobenzene-d₄
Fluorobenzene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 8260A-I

"LONG LIST" APPENDIX IX COMPOUNDS FOR 8260B

Mix E

7 Certified Components:

Acetone	2-Hexanone
2-Butanone	4-Methyl-2-pentanone
Carbon disulfide	Vinyl acetate
2-Chloroethylvinyl ether	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 8260-EH

1 mL @ 200 µg/mL in Methanol

Catalog#: 8260-E

2-Chloroethylvinyl Ether Stock Standard

1 Certified Component:

2-Chloroethylvinyl ether

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-855

1 mL @ 2,000 µg/mL in Methanol

Catalog#: S-855-2K

Vinyl Acetate Stock Standard

1 Certified Component:

Vinyl acetate

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-3800

Combined Stock Standard

2 Certified Components:

2-Chloroethylvinyl ether

Vinyl acetate

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CNVA

Ethylene Oxide Stock Standard

1 Certified Component:

Ethylene oxide

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-1960

Xylene-Free Chloroprene Stock Standard

1 Certified Component:

Chloroprene (2-chloro-1,3-butadiene)

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-930

1 mL @ 2,000 µg/mL in Methanol

Catalog#: S-930-2K

CLP SERIES - VOLATILES

The US EPA retains analytical services through the Contract Lab Program (CLP). The CLP follows detailed SOPs derived from EPA methods and SW-846. The CLP Volatile Organic Analysis method is an analytical method for the analysis of aqueous or solid samples for VOCs by GC-MS.

SOM 2.0 Volatiles

42 Certified Components:

Benzene	cis-1,3-Dichloropropene
Bromochloromethane	trans-1,3-Dichloropropene
Bromodichloromethane	Dibromochloromethane
Bromoform	Ethylbenzene
Carbon disulfide	Isopropylbenzene
Carbon tetrachloride	Methyl acetate
Chlorobenzene	Methyl tert-butyl ether
Chloroform	Methylcyclohexane
Cyclohexane	Methylene chloride
1,2-Dichlorobenzene	Styrene
1,3-Dichlorobenzene	Tetrachloroethene
1,4-Dichlorobenzene	1,1,2,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane	Toluene
1,2-Dibromoethane	1,2,3-Trichlorobenzene
1,1-Dichloroethane	1,2,4-Trichlorobenzene
1,2-Dichloroethane	1,1,1-Trichloroethane
1,1-Dichloroethene	1,1,2-Trichloroethane
cis-1,2-Dichloroethene	1,1,2-Trichloro-1,2,2-trifluoroethane
trans-1,2-Dichloroethene	m-Xylene
trans-1,3-Dichloropropene	o-Xylene
1,2-Dichloropropane	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-SOM2

Volatiles Mix for OLM04.1

43 Certified Components:

Acetone	1,2-Dichloropropane
Benzene	cis-1,3-Dichloropropene
Bromodichloromethane	trans-1,3-Dichloropropene
Bromoform	Ethylbenzene
2-Butanone	2-Hexanone
tert-Butyl methyl ether	Isopropylbenzene
Carbon disulfide	Methyl acetate
Carbon tetrachloride	Methylene chloride
Chlorobenzene	4-Methyl-2-pentanone
Chloroform	Styrene
Cyclohexane	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,2-Dibromo-3-chloropropane	Toluene
1,2-Dibromoethane	1,2,4-Trichlorobenzene
1,2-Dichlorobenzene	1,1,2-Trichloroethane
1,3-Dichlorobenzene	1,1,1-Trichloroethane
1,4-Dichlorobenzene	Trichloroethene
1,1-Dichloroethane	1,1,2-Trichlorotrifluoroethane
1,1-Dichloroethene	m-Xylene
1,2-Dichloroethane	o-Xylene
cis-1,2-Dichloroethene	p-Xylene
trans-1,2-Dichloroethene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-43CH

Mix B - Purgeable Gases for OLM04.1

6 Certified Components:

Bromomethane	Dichlorodifluoromethane
Chloroethane	Trichlorofluoromethane
Chloromethane	Vinyl chloride

1 mL @ 2,000 µg/mL in Methanol

Catalog#: 5022-BH

1 mL @ 200 µg/mL in Methanol

Catalog#: 5022-B

Volatile Organics Combination Standard

CLP Volatiles Mix

32 Certified Components:

Acetone	cis-1,3-Dichloropropene
Benzene	trans-1,3-Dichloropropene
Bromodichloromethane	Ethylbenzene
Bromoform	2-Hexanone
2-Butanone	Methylene chloride
Carbon disulfide	4-Methyl-2-pentanone
Carbon tetrachloride	Styrene
Chlorobenzene	1,1,2,2-Tetrachloroethane
Chloroform	Tetrachloroethene
Dibromochloromethane	Toluene
1,1-Dichloroethane	Trichloroethene
1,1-Dichloroethene	1,1,1-Trichloroethane
1,2-Dichloroethane	1,1,2-Trichloroethane
cis-1,2-Dichloroethene	m-Xylene
trans-1,2-Dichloroethene	o-Xylene
1,2-Dichloropropane	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-32CH

Mix B - Purgeable gases

4 Certified Components:

Bromomethane	Chloromethane
Chloroethane	Vinyl chloride

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-BH

Helpful Hint:

We value your input!
Please call **1-800-LAB-SPEX ext. 444** with
any suggestions, questions or comments.

Volatiles Mix A**15 Certified Components:**

Bromoform	trans-1,2-Dichloroethene
Carbon Tetrachloride	1,2-Dichloropropane
Chlorobenzene	Methylene chloride
Chloroform	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	Trichloroethene
1,1-Dichloroethene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-AH

1 mL @ 200 µg/mL in Methanol

Catalog#: CLPV-A**Volatiles Mix D****8 Certified Components:**

Acetone	2-Hexanone
2-Butanone	4-Methyl-2-pentanone
Carbon disulfide	Styrene
cis-1,2-Dichloroethene	p-Xylene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-D90H**Volatiles Mix D
for CLP SOW Alternate****9 Certified Components:**

Acetone	4-Methyl-2-pentanone
2-Butanone	Styrene
Carbon disulfide	Vinyl acetate
cis-1,2-Dichloroethene	p-Xylene
2-Hexanone	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-DH**Supplementary Volatiles Mix
for CLP OLM04.1****11 Certified Components:**

tert-Butyl methyl ether (MTBE)	1,4-Dichlorobenzene
Cyclohexane	Isopropylbenzene
1,2-Dibromo-3-chloropropane	Methyl acetate
1,2-Dibromoethane	1,2,4-Trichlorobenzene
1,2-Dichlorobenzene	1,1,2-Trichlorotrifluoroethane
1,3-Dichlorobenzene	

1 mL @ 200 µg/mL in Methanol

Catalog#: CLPV-041X**2-Chloroethylvinyl Ether Stock Standard****1 Certified Component:**

2-Chloroethylvinyl Ether

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-855**Vinyl Acetate Stock Standard****1 Certified Component:**

Vinyl Acetate

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-3800**Combined Stock Standard****2 Certified Components:**

2-Chloroethylvinyl ether

Vinyl acetate

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CNVA**Volatile Surrogate Standard
(System Monitoring Compounds)****3 Certified Components:**

4-Bromofluorobenzene

1,2-Dichloroethane-d₄Toluene-d₈

1 mL @ 2,500 µg/mL in Methanol

Catalog#: CLPV-SH**Matrix Spike****5 Certified Components:**

Benzene

Trichloroethene

Chlorobenzene

Toluene

1,1-Dichloroethene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: CLPV-MH**GC-MS Tuning Standard (BFB)****1 Certified Component:**

4-Bromofluorobenzene

1 mL @ 2,500 µg/mL in Methanol

Catalog#: CLPV-TH

1 mL @ 1,000 µg/mL in Methanol

Catalog#: S-550

TCLP VOLATILES STANDARDS

TCLP Volatiles Spike

11 Certified Components:

Benzene	1,2-Dichloroethane
2-Butanone	1,4-Dichlorobenzene
Carbon tetrachloride	Tetrachloroethene
Chlorobenzene	Trichloroethene
Chloroform	Vinyl chloride
1,1-Dichloroethylene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: TCLP-VX

TCLP Volatiles Spike - Alternate Formulation

11 Certified Components:

Benzene	1,2-Dichloroethane
2-Butanone (4,000 µg/mL)	1,4-Dichlorobenzene
Carbon tetrachloride	Tetrachloroethene
Chlorobenzene	Trichloroethene
Chloroform	Vinyl chloride
1,1-Dichloroethylene	

1 mL @ 2,000 µg/mL in Methanol

Catalog#: TCLP-VA

TCLP Volatiles Spike without Vinyl Chloride

10 Certified Components:

Benzene	1,1-Dichloroethylene
2-Butanone (10,000 µg/mL)	1,2-Dichloroethane
Carbon tetrachloride	1,4-Dichlorobenzene
Chlorobenzene	Tetrachloroethene
Chloroform	Trichloroethene

1 mL @ 2,000 µg/mL in Methanol

Catalog#: TCLP-V

SPECIALTY VOLATILES APPLICATION STANDARDS

Acetaldehyde Standards

Concentration	Volume	Catalog#
1,000 µg/mL in water	1.8 mL	S-125-W1.8

Alternate concentrations and volumes are readily available. Please call our sales department at 1-800-LAB-SPEX to discuss your requirements.

Chlorofluorocarbon Refrigerant Standards

Component @ 1,000 µg/mL:	Synonym	Catalog#
Chlorodifluoromethane	FREON 22	S-840
2-Chloro-1-1-1-trifluoroethane	HCFC-133a	S-958
1,2-Dichloro-1,1-difluoroethane	HCFC-132b	S-1477
Dichlorodifluoromethane	FREON 12	S-1370
1,1-Dichlorofluoroethane	FREON 141b	S-1480
Dichlorofluoromethane	FREON 21	S-1405
1,2-Dichlorotetrafluoroethane	FREON 114	S-1470
2,2-Dichloro-1,1,1-trifluoroethane	FREON 123	S-1476
1,2-Dichlorotrifluoroethane	HCFC-123a	S-1479
1,1,2-Trichlorofluoroethane	—	S-3617
Trichlorofluoromethane	FREON 11	S-3620
1,1,2-Trichlorotrifluoroethane	FREON 113	S-3675

Additional CFC's may be available. Please call our sales department at 1-800-LAB-SPEX ext. 444 to discuss your requirements.