

US EPA Methods (500, 600, 8000 and CLP Series) Standards & Mixes

Should you not find a mix that meets your needs, please telephone, fax or email us with your requirements, including a list of components, concentrations, solvent and quantity required. We can produce any mix and will be delighted to provide a quotation. Individual compounds can be found in the Individual Reference Standard section on page 99.

Drinking Water - 500 Series

EPA Method 501

Trihalomethanes

VOC - Mix 1

Bromodichloromethane
Bromoform
Chloroform
Dibromochloromethane

100 ng/µl each component
in methanol 1ml
XA05010100ME CE

Surrogate Standard Solution

Fluorobenzene
2000 ng/µl
in methanol 1ml
YA13781000ME CH

EPA Method 502.2 & 524.2

Volatile Organic Compounds

VOC - Mix 2

Bromomethane
Chloroethane
Chloromethane
Dichlorodifluoromethane
Trichlorofluoromethane
Vinyl chloride

200 ng/µl each component
in methanol 1ml
XA05020100ME CH

2000 ng/µl each component
in methanol 1ml
YA05020100ME DH

VOC - Mix 3

Bromochloromethane
Bromoform
Carbon tetrachloride
Chloroform
Dibromomethane
1,1-Dichloroethane
2,2-Dichloropropane
Tetrachloroethene
1,1,1-Trichloroethane

2000 ng/µl each component
in methanol 1ml
YA05020300ME DH

VOC - Mix 4

1,2-Dibromo-3-chloropropane
1,2-Dibromoethane (EDB)
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropane
1,1-Dichloropropene
1,3-Dichloropropene*
Hexachlorobutadiene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
Trichloroethylene
1,2,3-Trichloropropane

2000 ng/µl each component
in methanol 1ml
YA05020400ME DH
*4000 ng/µl total, 52% cis, 48% trans

VOC - Mix 5

Benzene
Bromobenzene
n-Butyl benzene
Ethylbenzene
p-Isopropyl toluene
Naphthalene
Styrene
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
m-Xylene

2000 ng/µl each component
in methanol 1ml
YA05020500ME DH

VOC - Mix 6

sec-Butyl benzene
tert-Butyl benzene
Chlorobenzene
4-Chlorotoluene
2-Chlorotoluene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Isopropylbenzene
n-Propyl benzene
o-Xylene
p-Xylene

2000 ng/µl each component
in methanol 1ml
YA05020600ME DH

Performance Standard Solution

4-Bromofluorobenzene
2000 ng/µl
in methanol 1ml
YA10731000ME CE

VOC - Mix 524

Bromodichloromethane
Dibromochloromethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
Dichloromethane (Methylene chloride)

2000 ng/µl each component
in methanol 1ml
YA05020200ME DH

VOC - Mix 7

Benzene
Bromodichloromethane
Bromoform
Carbon tetrachloride
Chloroform
Dibromochloromethane
1,4-Dichlorobenzene
1,2-Dichloroethane
1,1-Dichloroethene
1,1,1-Trichloroethane
Trichloroethene

2000 ng/µl each component
in methanol 1ml
YA05020700ME DH

VOC - Mix 8

Chlorobenzene
1,2-Dichlorobenzene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
Ethylbenzene
Styrene
Tetrachloroethene
Toluene
o-Xylene
m-Xylene
p-Xylene

2000 ng/µl each component
in methanol 1ml
YA05020800ME DH

VOC - Mix 9

Benzene
cis-1,2-Dichloroethene
Dichloromethane
Tetrachloroethene
Tetrachloromethane
Toluene
1,1,1-Trichloroethane
Trichloroethene
Trichloromethane
o-Xylene
m-Xylene
p-Xylene

1000 ng/µl each component
in acetone 1ml
YA05020900AC GD

EPA Method 502.2 & 524.2 cont.

VOC - Mix 14

Bromobenzene
 Bromochloromethane
 Bromodichloromethane
 Bromoform
 Carbon tetrachloride
 Chlorobenzene
 Chloroform
 4-Chlorotoluene
 2-Chlorotoluene
 Dibromochloromethane
 1,2-Dibromoethane
 Dibromomethane
 1,3-Dichlorobenzene
 1,2-Dichlorobenzene
 1,4-Dichlorobenzene
 1,1-Dichloroethane
 1,2-Dichloroethane
 cis-1,2-Dichloroethene
 trans-1,2-Dichloroethene
 1,1-Dichloroethene
 1,3-Dichloropropane
 1,2-Dichloropropane
 2,2-Dichloropropane
 1,1-Dichloropropene
 1,3-Dichloropropene*
 dichloromethane
 1,1,1,2-Tetrachloroethane
 1,1,2,2-Tetrachloroethane
 Tetrachloroethene
 1,1,1-Trichloroethane
 1,1,2-Trichloroethane
 Trichloroethene
 1,2,3-Trichloropropane
 (33 compounds)

200 ng/µl each component
 in methanol 1ml
 XA05021400ME FK
 * (400 ng/µl total 52% cis, 48% trans)

Internal Standard Solution Mix 16

1-Chloro-2-bromopropane
 Fluorobenzene

2000 ng/µl each component
 in methanol 1ml
 YA05021600ME CE

Internal Standards

| | |
|---------------------------|--------------|
| Compound | Cat. No. |
| 1-Chloro-2-fluorobenzene | XA11415500ME |
| 1,4-Dichlorobutane | XA12420500ME |
| 100 ng/µl in 1ml methanol | CE each |

Fluorobenzene YA13781000ME
 2000 ng/µl in 1ml methanol CH each

2-Bromo-1-chloropropane YA10722200ME
 1,4-Dichlorobutane YA12420500ME
 2000 ng/µl in 1ml methanol DF each

VOC-Mix 11

Dichloromethane
 1,2,4-Trichlorobenzene
 1,1,2-Trichloroethane

2000 ng/µl each component
 in methanol 1ml
 YA05021100ME DH

VOC - Mix 15

Benzene
 Bromobenzene
 Bromochloromethane
 Bromodichloromethane
 Bromoform
 n-Butyl benzene
 sec-Butyl benzene
 tert-Butyl benzene
 Carbon tetrachloride
 Chlorobenzene
 Chloroform
 2-Chlorotoluene
 4-Chlorotoluene
 1,2-Dibromo-3-chloropropane Dibromochloromethane
 1,2-Dibromoethane
 Dibromomethane
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 1,1-Dichloroethane
 1,2-Dichloroethane
 1,1-Dichloroethene
 cis-1,2-Dichloroethene
 trans-1,2-Dichloroethene
 Dichloromethane (Methylenechloride)
 1,2-Dichloropropane
 1,3-Dichloropropane
 2,2-Dichloropropane
 1,1-Dichloropropene
 *1,3-Dichloropropene
 Ethylbenzene
 Hexachlorobutadiene
 Isopropylbenzene
 p-Isopropyltoluene
 Naphthalene
 N-Propylbenzene
 Styrene
 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane
 Tetrachloroethene
 Toluene
 1,2,3-Trichlorobenzene
 1,2,4-Trichlorobenzene
 1,1,1-Trichloroethane
 1,1,2-Trichloroethane
 Trichloroethene
 1,2,3-Trichloropropane
 1,2,4-Trimethylbenzene
 1,3,5-Trimethylbenzene
 m-Xylene
 o-Xylene
 p-Xylene
 (54 compounds)

200 ng/µl each component
 in methanol 1ml
 XA05021500ME HD
 * (400ng/µl total 52% cis, 48% trans)

Fortification Solution - Mix 19

4-Bromofluorobenzene
 1,2-Dichlorobenzene
 Fluorobenzene

2000 ng/µl each component
 in methanol 1ml
 YA05021900ME DC

VOC - Mix 20

Benzene
 Bromobenzene
 Bromochloromethane
 Bromodichloromethane
 Bromoform
 Bromomethane
 n-Butyl benzene
 tert-Butyl benzene
 sec-Butyl benzene
 Carbon tetrachloride
 Chlorobenzene
 Chloroethane
 Chloroform
 Chloromethane
 2-Chlorotoluene
 4-Chlorotoluene
 1,2-Dibromo-3-chloropropane Dibromochloromethane
 1,2-Dibromoethane
 Dibromomethane
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 Dichlorodifluoromethane
 1,1-Dichloroethane
 1,2-Dichloroethane
 1,1-Dichloroethene
 cis-1,2-Dichloroethene
 trans-1,2-Dichloroethene
 Dichloromethane (Methylenechloride)
 1,2-Dichloropropane
 1,3-Dichloropropane
 2,2-Dichloropropane
 1,1-Dichloropropene
 *1,3-Dichloropropene
 Ethylbenzene
 Hexachlorobutadiene
 Isopropylbenzene
 p-Isopropyl toluene
 Naphthalene
 n-Propyl benzene
 Styrene
 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane
 Tetrachloroethane
 Tetrachloroethene
 Toluene
 1,2,3-Trichlorobenzene
 1,2,4-Trichlorobenzene
 1,1,1-Trichloroethane
 1,1,2-Trichloroethane
 Trichloroethene
 Trichlorofluoromethane
 1,2,3-Trichloropropane
 1,2,4-Trimethylbenzene
 1,3,5-Trimethylbenzene
 m-Xylene
 o-Xylene
 p-Xylene
 (59 compounds)

200 ng/µl each component
 in methanol 1ml
 XA05022000ME HL
 * (400 ng/µl total 52% cis, 48% trans)

Surrogate Standard Solution

| | |
|------------------------|--------------|
| Compound | Cat. No. |
| 1,2-Dichlorobenzene D4 | YA12370100ME |
| 4-Bromofluorobenzene | YA10731000ME |

2000 ng/µl in 1ml methanol CE each

VOC - Mix 21

Bromodichloromethane
 Chlorodibromomethane
 1,2-Dibromoethane
 1,2-Dichloroethane
 Tetrachloroethene
 Tetrachloromethane
 Tribromomethane
 1,1,1-Trichloroethane
 Trichloroethene
 Trichloromethane

200 ng/µl each component
 in methanol 1ml
 XA05022100ME EF

VOC - Mix 23

Bromodichloromethane 50 ng/µl
 Bromoform 50 ng/µl
 Carbon tetrachloride 6 ng/µl
 Chlorodibromomethane 50 ng/µl
 Chloroform 50 ng/µl
 Tetrachloroethene 20 ng/µl
 Trichloroethene 60 ng/µl

in methanol 1ml
 XA05022300ME CH

VOC-Mix 108

Bromochloromethane 1000 ng/µl
 Bromodichloromethane 1000 ng/µl
 Chlorobenzene 1000 ng/µl
 Dibromochloromethane 1000 ng/µl
 Dibromomethane 1000 ng/µl
 1,2-Dichlorobenzene 1000 ng/µl
 1,3-Dichlorobenzene 1000 ng/µl
 1,1-Dichloroethane 1000 ng/µl
 1,2-Dichloroethane 1000 ng/µl
 1,1-Dichloroethene 1000 ng/µl
 cis-1,2-Dichloroethene 1000 ng/µl
 trans-1,2-Dichloroethene 1000 ng/µl
 Dichloromethane 1000 ng/µl
 1,2-Dichloropropane 1000 ng/µl
 1,3-Dichloropropane 1000 ng/µl
 Hexachlorobutadiene 1000 ng/µl
 1,1,1,2-Tetrachloroethane 1000 ng/µl
 1,1,2,2-Tetrachloroethane 1000 ng/µl
 Tetrachloroethene 50 ng/µl
 Tetrachloromethane 50 ng/µl
 Tribromomethane 1000 ng/µl
 1,1,1-Trichloroethane 1000 ng/µl
 1,1,2-Trichloroethane 1000 ng/µl
 1,1,2-Trichloroethene 1000 ng/µl
 Trichloromethane 1000 ng/µl

in methanol 10x1,5 ml
 YS05700800ME CAA

Internal Standard

alpha,alpha,alpha-Trifluorotoluene

2000 ng/µl
 in methanol 1ml
 YA17846000ME DC

VOC-Mix 61

Headspace determination DIN 38407-F5

Bromodichloromethane 1000 ng/µl
 Dibromochloromethane 1000 ng/µl
 1,2-Dichloroethane 10000 ng/µl
 cis-1,2-Dichloroethene 10000 ng/µl
 Dichloromethane 5000 ng/µl
 Tetrachloroethene 1000 ng/µl
 Tetrachloromethane 1000 ng/µl
 Tribromomethane 1000 ng/µl
 1,1,1-Trichloroethane 1000 ng/µl
 Trichloroethene 1000 ng/µl
 Trichloromethane 1000 ng/µl

in methanol 1ml
 YA05026100ME EC

VOC Mix 43

Acetone
 2-Butanone
 1,1-Dichloropropanone-2
 2-Hexanone
 4-Methyl-2-pentanone

2000 ng/µl each component
 in methanol:water (9:1) 1ml
 YA08240300MW EC

EPA Method 503.1

Volatile Aromatic & Unsaturated Organic Compounds

Method 503.1 - Mix 1

Benzene
 Bromobenzene
 n-Butyl benzene
 sec-Butyl benzene
 tert-Butyl benzene
 Chlorobenzene
 2-Chlorotoluene
 4-Chlorotoluene
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 Ethylbenzene
 Hexachlorobutadiene
 Isopropylbenzene
 p-Isopropyl toluene
 Naphthalene
 n-Propyl benzene
 Styrene
 Tetrachloroethene
 Toluene
 1,2,3-Trichlorobenzene
 1,2,4-Trichlorobenzene
 Trichloroethene
 1,2,4-Trimethylbenzene
 1,3,5-Trimethylbenzene
 m-Xylene
 o-Xylene
 p-Xylene
 (28 compounds)

200 ng/µl each component
 in methanol 1ml
 XA05030100ME EF

Method 503.1 - Mix 2

Hexachlorobutadiene
 Tetrachloroethylene
 Trichloroethylene

2000 ng/µl each component
 in methanol 1ml
 YA05030200ME DF

EPA Method 505

Organohalide Pesticides & PCBs

Chlordane, Toxaphene, Aroclors

| Compound | Cat. No. |
|--------------|-----------------|
| Chlordane | YA11200000ME CH |
| Toxaphene | YA10940000HE DA |
| Aroclor 1016 | YA20101600CY DF |
| Aroclor 1221 | YA20122100CY DF |
| Aroclor 1232 | YA20123200CY DF |
| Aroclor 1242 | YA20124200CY DF |
| Aroclor 1248 | YA20124800CY DF |
| Aroclor 1254 | YA20125400CY DF |
| Aroclor 1260 | YA20126000CY DF |
| YA | 1000ng/µl |

each 1ml as stated
 in methanol or cyclohexane

Organohalide Pesticide Mix 1

Alachlor
 Aldrin
 Atrazine
 trans-Chlordane (gamma-Chlordane)
 Dieldrin
 Endrin
 Heptachlor
 Heptachlor-exo-epoxide (Isomer B)
 Heptachlor-endo-epoxide (Isomer A)
 Hexachlorobenzene
 Hexachlorocyclopentadiene
 gamma-HCH (Lindane)
 Methoxychlor
 cis-Nonachlor
 trans-Nonachlor
 Simazine

100 ng/µl each component
 in acetone 1ml
 XA05050100AC FK

Organohalide Pesticide Mix 2

Alachlor
 Aldrin
 Dieldrin
 Endrin
 Heptachlor
 Heptachlor epoxide
 Hexachlorobenzene
 gamma-HCH (Lindane, gamma-BHC)
 Methoxychlor

100 ng/µl each component
 in methanol 1ml
 XA05050200ME EF

Organohalide Pesticide Mix 4

Alachlor
Aldrin
Dieldrin
gamma-HCH (Lindane, gamma-BHC)
cis-Nonachlor
trans-Nonachlor
Simazine

500 ng/µl each component
in acetone 1ml
XA05050400AC EC

Organohalide Pesticide Mix 5

Atrazine
cis-Chlordane (alpha-Chlordane)
trans-Chlordane (gamma-Chlordane)
Endrin
Heptachlor
Heptachlor-exo-epoxide (Isomer B)
Hexachlorobenzene
Hexachlorocyclopentadiene
Methoxychlor

500 ng/µl each component
in acetone 1ml
XA05050500AC EC

Performance Check Solutions

Endrin
100 ng/µl
in iso-octane 1ml
XA13160000IO CE

Endrin aldehyde
100 ng/µl
in cyclohexane 1ml
XA13161000CY CE

Endrin ketone
100 ng/µl
in cyclohexane 1ml
XA13165000CY CH

EPA Method 506

Phthalate and Adipate Esters

Adipic acid-bis-2-ethylhexyl ester
Phthalic acid, benzylbutyl ester
Phthalic acid, bis-butyl ester
Phthalic acid, bis-ethyl ester
Phthalic acid, bis-2-ethylhexyl ester
Phthalic acid, bis-methyl ester
Phthalic acid, bis-1-octyl ester

100 ng/µl each component
in methanol 1ml
XA05060100ME DC

EPA Method 508

Chlorinated Pesticide Mix 1

Aldrin
α-BHC
β-BHC
δ-BHC
γ-BHC
4,4'-DDD
4,4'-DDE
4,4'-DDT
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide (isomer B)
Methoxychlor

1000 ng/µl each component
in methyl tert-butyl ether 1ml
YA05080100MB GD

Chlorinated Pesticide Mix 2

cis-Chlordane (alpha)
trans-Chlordane (gamma)
Chlorobenzilate
Chloroneb
Chlorothalonil
Chlorthal-dimethyl (Dacthal, DCPD)
Etridiazole
Hexachlorobenzene
cis-Permethrin
trans-Permethrin
Propachlor
Trifluralin

1000 ng/µl each component
in methyl tert-butyl ether 1ml
YA05080200MB FK

Chlorinated Pesticide Mix 3

Alachlor
Atrazine
Butachlor
Hexachlorocyclopentadiene
Metolachlor
Simazine

1000 ng/µl each component
in acetone 1ml
YA05080300AC EF

Internal Standard

Quintozene (Pentachloronitrobenzene)
100 ng/µl
in cyclohexane 1ml
XA16730000CY CH

Triphenyl phosphate
500 ng/µl
in methyl tert-butyl ether 1ml
XA17893000MB CE

Individual Compounds

| Compound | Cat. No. |
|-----------------|-----------------|
| Biphenyl | XA10630000ME CE |
| Biphenyl | C 10630000 CE |
| Chlordane | YA11200000ME CH |
| cis-Chlordane | XA11201000CY CE |
| trans-Chlordane | XA11202000CY CE |
| Cyanazine | XA11790000AL CH |

Hexachlorocyclopentadiene
XA14171000IO CE

| | |
|--------------|-----------------|
| Toxaphene | YA10940000HE DA |
| Aroclor 1016 | YA20101600CY DF |
| Aroclor 1221 | YA20122100CY DF |
| Aroclor 1232 | YA20123200CY DF |
| Aroclor 1242 | YA20124200CY DF |
| Aroclor 1248 | YA20124800CY DF |
| Aroclor 1254 | YA20125400CY DF |
| Aroclor 1260 | YA20126000CY DF |
| XA | 100ng/µl |
| YA | 1000ng/µl |

each 1ml as stated
in hexane or cyclohexane

EPA Method 515

Chlorinated Acids

Chlorinated Acids Underivatized Mix 2

| | |
|--------------------------|-----------|
| Acifluorfen | 100ng/µl |
| Bentazon | 200ng/µl |
| Chloramben | 100ng/µl |
| 2,4-D | 200ng/µl |
| Dalapon | 1300ng/µl |
| 2,4-DB | 800ng/µl |
| DCPA acid (Propanil) | 100ng/µl |
| Dicamba | 100ng/µl |
| Dichloroprop | 300ng/µl |
| 3,5-Dichlorobenzoic acid | 100ng/µl |
| Dinoseb | 200ng/µl |
| 4-Nitrophenol | 100ng/µl |
| Picloram | 100ng/µl |
| Pentachlorophenol | 100ng/µl |
| 2,4,5-T | 100ng/µl |
| 2,4,5-TP | 100ng/µl |

in methanol 1ml
XA05150200ME BBK

Surrogate Standard

2,4-Dichlorophenyl acetic acid methyl ester

100 ng/µl
in methyl tert-butyl ether 1ml
XA12468000MB CE

Internal Standard

4,4'-Dibromooctafluorobiphenyl

100 ng/µl in cyclohexane 1ml
XA12240600CY CC

EPA Method 524.1 & 524.2

VOC - Mix 20

Benzene
 Bromobenzene
 Bromochloromethane
 Bromodichloromethane
 Bromoform
 Bromomethane
 n-Butyl benzene
 tert-Butyl benzene
 sec-Butyl benzene
 Carbon tetrachloride
 Chlorobenzene
 Chloroethane
 Chloroform
 Chloromethane
 2-Chlorotoluene
 4-Chlorotoluene
 1,2-Dibromo-3-chloropropane
 Dibromochloromethane
 1,2-Dibromoethane
 Dibromomethane
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 Dichlorodifluoromethane
 1,1-Dichloroethane
 1,2-Dichloroethane
 1,1-Dichloroethene
 cis-1,2-Dichloroethene
 trans-1,2-Dichloroethene
 Dichloromethane (Methylenechloride)
 1,2-Dichloropropane
 1,3-Dichloropropane
 2,2-Dichloropropane
 1,1-Dichloropropene
 *1,3-Dichloropropene
 Ethylbenzene
 Hexachlorobutadiene
 Isopropylbenzene
 p-Isopropyl toluene
 Naphthalene
 n-Propyl benzene
 Styrene
 1,1,1,2-Tetrachloroethane
 1,1,1,2,2-Tetrachloroethane
 Tetrachloroethene
 Toluene
 1,2,3-Trichlorobenzene
 1,2,4-Trichlorobenzene
 1,1,1-Trichloroethane
 1,1,2-Trichloroethane
 Trichloroethene
 Trichlorofluoromethane
 1,2,3-Trichloropropane
 1,2,4-Trimethylbenzene
 1,3,5-Trimethylbenzene
 m-Xylene
 o-Xylene
 p-Xylene
 (59 compounds)

200 ng/µl each component
 in methanol 1ml
 XA05022000ME HL
 * (400 ng/µl total 52% cis, 48% trans)

Surrogate Standard Solution

| | |
|----------------------------|--------------|
| Compound | Cat. No. |
| 1,2-Dichlorobenzene D4 | YA12370100ME |
| 4-Bromofluorobenzene | YA10731000ME |
| 2000 ng/µl in 1ml methanol | CE each |

VOC Mix 43

Acetone
 2-Butanone
 1,1-Dichloropropanone-2
 2-Hexanone
 4-Methyl-2-pentanone

 2000 ng/µl each component
 in methanol:water (9:1) 1ml
 YA08240300MW EC

VOC Mix 524

Acrylic acid methyl ester
 Acrylonitrile
 Allyl chloride
 Carbondisulfide
 Chloroacetonitrile
 1-Chlorobutane
 trans-1,4-Dichloro-2-butene
 Diethylether
 Ethylmethacrylate
 Hexachloroethane
 Methacrylonitrile
 Methylacrylic acid methyl ester
 Methyl-tert.butylether
 Nitrobenzene
 2-Nitropropane
 Pentachloroethane
 Propionitrile
 Tetrahydrofuran

 200 ng/µl each component
 in methanol 1ml
 XA05240100ME EC

Iodomethane Standard

2000 ng/µl
 in methanol:water (8:2) 1ml
 YA14343000MW DF

VOC - Mix 1

Bromodichloromethane
 Bromoform
 Chloroform
 Dibromochloromethane

 100 ng/µl each component
 in methanol 1ml
 XA05010100ME CE

VOC - Mix 4

1,2-Dibromo-3-chloropropane
 1,2-Dibromoethane (EDB)
 1,2-Dichloroethane
 1,2-Dichloropropane
 1,3-Dichloropropane
 1,1-Dichloropropene
 1,3-Dichloropropene*
 Hexachlorobutadiene
 1,1,1,2-Tetrachloroethane
 1,1,1,2,2-Tetrachloroethane
 1,1,2-Trichloroethane
 Trichloroethylene
 1,2,3-Trichloropropane
 *4000 ng/µl total, 52% cis, 48% trans

 2000 ng/µl each component
 in methanol 1ml
 YA05020400ME DH

VOC - Mix 3

Bromochloromethane
 Bromoform
 Carbon tetrachloride
 Chloroform
 Dibromomethane
 1,1-Dichloroethane
 2,2-Dichloropropane
 Tetrachloroethene
 1,1,1-Trichloroethane

 2000 ng/µl each component
 in methanol 1ml
 YA05020300ME DH

VOC - Mix 5

Benzene
 Bromobenzene
 n-Butyl benzene
 Ethylbenzene
 p-Isopropyl toluene
 Naphthalene
 Styrene
 Toluene
 1,2,3-Trichlorobenzene
 1,2,4-Trichlorobenzene
 1,2,4-Trimethylbenzene
 1,3,5-Trimethylbenzene
 m-Xylene

 2000 ng/µl each component
 in methanol 1ml
 YA05020500ME DH

VOC - Mix 6

sec-Butyl benzene
 tert-Butyl benzene
 Chlorobenzene
 4-Chlorotoluene
 2-Chlorotoluene
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 Isopropylbenzene
 n-Propyl benzene
 o-Xylene
 p-Xylene

 2000 ng/µl each component
 in methanol 1ml
 YA05020600ME DH

VOC - Mix 524

Bromodichloromethane
 Dibromochloromethane
 1,1-Dichloroethene
 cis-1,2-Dichloroethene
 trans-1,2-Dichloroethene
 Dichloromethane (Methylene chloride)

 2000 ng/µl each component
 in methanol 1ml
 YA05020200ME DH

Internal Standards

| | |
|----------------------------|--------------|
| Fluorobenzene | YA13781000ME |
| 2000 ng/µl in methanol | 1ml CH |
| 1,2-Dichlorobenzene D4 | YA12370100ME |
| 4-Bromofluorobenzene | YA10731000ME |
| 2000 ng/µl in 1ml methanol | CE each |

EPA Method 525

Semivolatiles Calibration Mix 525

Acenaphthylene
 Adipic acid-bis-2-ethylhexyl ester
 Anthracene
 Benzo(a)anthracene
 Benzo(b)fluoranthene
 Benzo(k)fluoranthene
 Benzo(g,h,i)perylene
 Benzo(a)pyrene
 Chrysene
 Dibenzo(a,h)anthracene
 2,4-Dinitrotoluene
 2,6-Dinitrotoluene
 Fluorene
 Hexachlorobenzene
 Hexachlorocyclopentadiene
 Indeno(1,2,3-cd)pyrene
 Isophorone

Pentachlorophenol 4000 ng/μl

Phenanthrene
 Phthalic acid, benzylbutyl ester
 Phthalic acid, bis-butyl ester
 Phthalic acid, bis-ethyl ester
 Phthalic acid, bis-2-ethylhexyl ester
 Phthalic acid, bis-methyl ester
 Pyrene

1000 ng/μl each component
 in acetone 1ml
 YA05250300AC EF

PAH Mix 25

Acenaphthylene
 Anthracene
 Benzo(a)anthracene
 Benzo(b)fluoranthene
 Benzo(k)fluoranthene
 Benzo(g,h,i)perylene
 Benzo(a)pyrene
 Chrysene
 Dibenzo(a,h)anthracene
 Fluorene
 Indeno(1,2,3-cd)pyrene
 Phenanthrene
 Pyrene

100 ng/μl each component
 in acetone 1ml
 XA05250100AC EC

Organohalide Pesticide Mix 4

Alachlor
 Aldrin
 Atrazine
 alpha-Chlordane
 gamma-Chlordane
 Endrin
 Heptachlor
 Heptachlor epoxide (isomer B)
 gamma-HCH (Lindane,gamma-BHC)
 4,4'-Methoxychlor
 trans-Nonachlor
 Simazine

100 ng/μl each component
 in acetone 1ml
 XA05250400AC KL

Organohalide Pesticide Mix 5

Atrazine
 cis-Chlordane (alpha-Chlordane)
 trans-Chlordane (gamma-Chlordane)
 Endrin
 Heptachlor
 Heptachlor-exo-epoxide (Isomer B)
 Hexachlorobenzene
 Hexachlorocyclopentadiene
 Methoxychlor

500 ng/μl each component
 in acetone 1ml
 XA05050500AC EC

Phthalate and Adipate Esters

Adipic acid-bis-2-ethylhexyl ester
 Phthalic acid, benzylbutyl ester
 Phthalic acid, bis-butyl ester
 Phthalic acid, bis-ethyl ester
 Phthalic acid, bis-2-ethylhexyl ester
 Phthalic acid, bis-methyl ester
 Phthalic acid, bis-1-octyl ester

100 ng/μl each component
 in methanol 1ml
 XA05060100ME DC

Tuning Standard

Decafluorotriphenylphosphine
 1000 ng/μl
 in acetone 1ml
 YA12093000AC CE

Internal Standards Mix 25

Acenaphthene D10
 Chrysene D12
 Perylene D12
 Phenanthrene D10

500 ng/μl each component
 in acetone 1ml
 XA05250600AC EF

Toxaphene Standard Solution

Camphechlor (Toxaphene)
 4000 ng/μl
 in hexane 1ml
 YA10940000HE DA

single congeners are available

please see Toxaphene section

Tuning Solution

Perylene D12
 2000 ng/μl
 in toluene 1ml
 YA20915100TO EC

EPA Method 531.1

Carbamate Pesticides

N-Methylcarbamates & N-Methyl carbamoyloximes Mix 1

Aldicarb
 Aldicarb sulfone
 Aldicarb sulfoxide
 Carbaryl
 Carbofuran
 3-Hydroxycarbofuran
 Methiocarb
 Methomyl
 1-Naphthol
 Oxamyl
 Propoxur

100 ng/μl each compound
 in methyl tert-butyl ether 1ml
 XA05310100MB FC

Internal Standards

4-Bromo-3,5-dimethylphenyl-N-methylcarbamate
 C 10727000 0.1g DF

Fluorobenzene
 2000 ng/μl in methanol 1ml
 YA13781000ME CH

1,2-Dichlorobenzene D4
 2000 ng/μl in methanol 1ml
 YA12370100ME CE

4-Bromofluorobenzene
 2000 ng/μl in methanol 1ml
 YA10731000ME CE

EPA Method 550

Polycyclic Aromatic Hydrocarbons

PAH Mix 50

Acenaphthene 1000 ng/μl
 Acenaphthylene 1000 ng/μl
 Anthracene 50 ng/μl
 Benzo(a)anthracene 1 ng/μl
 Benzo(a)pyrene 5 ng/μl
 Benzo(b)fluoranthene 1 ng/μl
 Benzo(g,h,i)perylene 5 ng/μl
 Benzo(k)fluoranthene 1 ng/μl
 Chrysene 50 ng/μl
 Dibenzo(a,h)anthracene 10 ng/μl
 Fluoranthene 50 ng/μl
 Fluorene 100ng/μl
 Indeno(1,2,3-cd)pyrene 10 ng/μl
 Naphthalene 1000 ng/μl
 Phenanthrene 50 ng/μl
 Pyrene 50 ng/μl
 (16 compounds)

in acetonitrile 1ml
 XA05500100AL LE

EPA Method 551

Chlorinated Organic & Disinfectant By-Products Mix 1

Bromochloroacetonitrile
 Bromodichloromethane
 Bromoform
 Carbon tetrachloride
 Chloroform
 Chloropicrin
 1,2-Dibromo-3-chloropropane
 Dibromoacetonitrile
 Dibromochloromethane
 1,2-Dibromoethane
 Dichloroacetonitrile
 1,1-Dichloropropane-2
 Tetrachloroethene
 Trichloroacetonitrile
 1,1,1-Trichloroethane
 Trichloroethene

100 ng/µl each component
 in acetone 1ml
 XA05510100AC EC

Chloralhydrate
 1000 ng/µl in acetonitrile 1ml
 YA11098000AL CH

EPA Method 552.2

Halogenated Acetic Acids Mix 4

| | |
|----------------------------|------------|
| Bromoacetic acid | 400 ng/µl |
| Bromochloroacetic acid | 400 ng/µl |
| Bromodichloroacetic acid | 400 ng/µl |
| Chloroacetic acid | 600 ng/µl |
| Dibromoacetic acid | 200 ng/µl |
| Dibromochloroacetic acid | 1000 ng/µl |
| Dichloroacetic acid | 600 ng/µl |
| Tribromoacetic acid | 2000 ng/µl |
| TCA (Trichloroacetic acid) | 200 ng/µl |

in methyl tert-butyl ether 1ml
 YA05520400MB FA

Methyl Derivatives Mix 6

| | |
|----------------------------|------------|
| Bromoacetic acid | 400 ng/µl |
| Bromochloroacetic acid | 400 ng/µl |
| Bromodichloroacetic acid | 400 ng/µl |
| Chloroacetic acid | 600 ng/µl |
| Dibromoacetic acid | 200 ng/µl |
| Dibromochloroacetic acid | 1000 ng/µl |
| Dichloroacetic acid | 600 ng/µl |
| Tribromoacetic acid | 2000 ng/µl |
| TCA (Trichloroacetic acid) | 200 ng/µl |

all components as methyl ester
 in methyl tert-butyl ether 1ml
 YA05520600MB GK

Drinking Water Odor Mix 1

Geosmin
 2-Methylisoborneol

100 ng/µl each component
 in methanol 1ml
 XA05520700ME GD

Individual Standards

Please see alphabetical section
 for details of individual compounds

Water Odor Standards

Geosmin, 2-Methylisoborneol et al.
 see separate section of

Odor Compounds

Halogenated Acetic Acids

Bromoacetic acid
 Bromochloroacetic acid
 Bromodichloroacetic acid
 Chloroacetic acid
 Dibromochloroacetic acid
 Dalapon
 Dibromoacetic acid
 Dichloroacetic acid
 TCA (Trichloroacetic acid)
 Tribromoacetic acid

Bromoacetic acid methyl ester
 Bromochloroacetic acid-methyl ester
 Bromodichloroacetic acid-methyl ester
 Chloroacetic acid methyl ester
 Dalapon-methyl ester
 Dibromoacetic acid-methyl ester
 Dibromochloroacetic acid-methyl ester
 Dichloroacetic acid-methyl ester
 Tribromoacetic acid-methyl ester
 TCA-methyl ester
 (Trichloroacetic acid-methyl ester)

2,4-Dichlorophenol
 5000 ng/µl in methanol 1ml
 YA12451000ME EC

2,4,6-Trichlorophenol
 5000 ng/µl in methanol 1ml
 YA17774600ME EC

Internal Standard

1,2,3-Trichloropropane
 100 ng/µl in methanol 1ml
 XA17780000ME CC

Surrogate Standards

3,5-Dichlorobenzoic acid
 1000 ng/µl in methyl tert-butyl ether 1ml
 YA12403100MB DA

2-Bromopropionic acid
 1000 ng/µl in methyl tert-butyl ether 1ml
 YA10760700MB DA

2-Bromopropionic acid-methyl ester
 1000 ng/µl in methyl tert-butyl ether 1ml
 YA10761000MB DA

2,3-Dibromopropionic acid
 1000 ng/µl in methyl tert-butyl ether 1ml
 YA12242500MB DA

2,3-Dibromopropionic acid-methyl ester
 in methyl tert-butyl ether 1ml
 YA12242600MB DA

EPA Method 555

Chlorinated Herbicides

Chlorinated Acids - Mix 1

Acifluorfen
 Bentazon
 Chloramben
 2,4-D
 Dicamba
 Dichlorprop
 Fenoprop (Silvex; 2,4,5-TP)
 Picloram

1000 ng/µl each component
 in acetonitrile 1ml
 YA05550100AL KL

Chlorinated Acids - Mix 2

2,4-DB
 3,5-Dichlorobenzoic acid
 Dinoseb
 MCPA
 MCPP
 4-Nitrophenol
 Pentachlorophenol
 2,4,5-T

1000 ng/µl each component
 in acetonitrile 1ml
 YA05550200AL KL

EPA Method 601

Purgeables Halocarbons

EPA 601/602 Calibration Mix

Benzene
 Bromodichloromethane
 Bromoform
 Carbon tetrachloride
 Chlorobenzene
 Chloroform
 2-Chloroethyl-vinylether
 Dibromochloromethane
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 1,1-Dichloroethane
 1,2-Dichloroethane
 trans-1,2-Dichloroethene
 1,1-Dichloroethene
 Dichloromethane
 1,2-Dichloropropane
 cis-1,3-Dichloropropene
 trans-1,3-Dichloropropene
 Ethylbenzene
 1,1,2,2-Tetrachloroethane
 Tetrachloroethene
 Toluene
 1,1,1-Trichloroethane
 1,1,2-Trichloroethane
 Trichloroethene

2000 ng/µl each component
 in methanol 1ml
 YA06010400ME DH

VOC - Mix 2

Bromomethane
Chloromethane
Chloroethane
Dichlorodifluoromethane
Trichlorofluoromethane
Vinyl chloride

200 ng/µl each component
in methanol 1ml
XA05020100ME CH

2000 ng/µl each component
in methanol 1ml
YA05020100ME DH

Purgeables Halocarbons Mix 5

Bromodichloromethane
Chlorobenzene
Dibromochloromethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
trans-1,2-Dichloroethene
Dichloromethane
1,2-Dichloropropane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Tetrachloromethane
Tribromomethane
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichloromethane

2000 ng/µl each component
in methanol 1ml
YA06010500ME CH

Purgeables Halocarbons Mix 6

| | |
|---------------------------|----------|
| Chlorobenzene | 600ng/µl |
| 1,2-Dichlorobenzene | 600ng/µl |
| 1,3-Dichlorobenzene | 600ng/µl |
| 1,4-Dichlorobenzene | 600ng/µl |
| 1,1-Dichloroethane | 120ng/µl |
| 1,2-Dichloroethane | 120ng/µl |
| 1,1-Dichloroethene | 120ng/µl |
| trans-1,2-Dichloroethene | 120ng/µl |
| Dichloromethane | 600ng/µl |
| 1,2-Dichloropropane | 120ng/µl |
| cis-1,3-Dichloropropene | 120ng/µl |
| trans-1,3-Dichloropropene | 120ng/µl |
| 1,1,2,2-Tetrachloroethane | 120ng/µl |
| Tetrachloroethene | 120ng/µl |
| Tetrachloromethane | 120ng/µl |
| 1,1,1-Trichloroethane | 120ng/µl |
| 1,1,2-Trichloroethane | 120ng/µl |
| Trichloroethene | 120ng/µl |

each component
in methanol 1ml
XA06010600ME DH

Purgeables Halocarbons Mix 2

Bromodichloromethane
Bromoform
Chloroform
Dibromochloromethane

200 ng/µl each component
in methanol 1ml
XA06010200ME DC

2000 ng/µl each component
in methanol 1ml
YA06010200ME DH

Individual Standards

Bromodichloromethane YA10726700ME
2-Chloroethyl-vinylether YA11410400ME
Tribromomethane YA17665500ME
Trichloromethane YA17739500ME

single compounds 1ml
5000 ng/µl in methanol EC

Internal & Surrogate Standards

Bromochloromethane YA10720800ME
Dibromochloromethane YA12234700ME
1,4-Dichlorobutane YA12420500ME
2-Bromo-1-chloropropane YA10722200ME

single compounds 1ml
2000 ng/µl in methanol DH

EPA Method 602

EPA 601/602 Calibration Mix

Benzene
Bromodichloromethane
Bromoform
Carbon tetrachloride
Chlorobenzene
Chloroform
2-Chloroethyl-vinylether
Dibromochloromethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
trans-1,2-Dichloroethene
1,1-Dichloroethene
Dichloromethane
1,2-Dichloropropane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene

2000 ng/µl each component
in methanol 1ml
YA06010400ME DH

Purgeable Aromatics Mix 1

Benzene
Chlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Ethylbenzene
Toluene

200 ng/µl each component
in methanol 1ml
XA06020100ME DC

Surrogate Standard

alpha,alpha,alpha -Trifluorotoluene

2000 ng/µl
in methanol 1ml
YA17846000ME DC

EPA Method 603

Acrolein (2-Propenal)
certified neat 5 ml
C 10045000 32,00

Acrylonitrile
certified neat 5 ml
C 10045500 17,00

Purgeable Aromatics for Gasoline Identification Mix 3

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

200 ng/µl each component
in methanol 1ml
XA06020300ME EC

EPA Method 604

Phenols Mix 604

| | |
|----------------------------|------------|
| 4-Chloro-3-methyl phenol | 2500 ng/µl |
| 2-Chlorophenol | 500 ng/µl |
| 2,4-Dichlorophenol | 500 ng/µl |
| 2,4-Dimethylphenol | 500 ng/µl |
| 2,4-Dinitrophenol | 1500 ng/µl |
| 2-Methyl-4,6-dinitrophenol | 2500 ng/µl |
| 2-Nitrophenol | 500 ng/µl |
| 4-Nitrophenol | 2500 ng/µl |
| Pentachlorophenol | 2500 ng/µl |
| Phenol | 500 ng/µl |
| 2,4,6-Trichlorophenol | 1500 ng/µl |

in methanol 1ml
YA06040100ME DF

EPA Method 605

Benzidine Mix 2

Benzidine
3,3'-Dichlorobenzidine

2000 ng/µl each component
in methanol 1ml
YA08270600ME DC

EPA Method 606

Phthalate Esters Mix 1

Phthalic acid, benzylbutyl ester
Phthalic acid, bis-butyl ester
Phthalic acid, bis-ethyl ester
Phthalic acid, bis-2-ethylhexyl ester
Phthalic acid, bis-methyl ester
Phthalic acid, bis-1-octyl ester

200 ng/µl each component
in methanol 1ml
XA08060100ME DC

2000 ng/µl each component
in iso-octane 1ml
YA08060100IO DH

EPA Method 607

Nitrosoamines Mix 1

N-Nitroso-di-methylamine
N-Nitroso-di-phenylamine
N-Nitroso-di-n-propylamine

2000 ng/µl each component
in methanol 1ml
YA08070100ME DC

EPA Method 608

Organochlorine Pesticide Mix 1

Aldrin 100 ng/µl
alpha-BHC 100 ng/µl
beta-BHC 100 ng/µl
gamma-BHC 100 ng/µl
delta-BHC 100 ng/µl
4,4'-DDD 600 ng/µl
4,4'-DDE 200 ng/µl
4,4'-DDT 600 ng/µl
Dieldrin 200 ng/µl
alpha-Endosulfan 200 ng/µl
beta-Endosulfan 200 ng/µl
Endosulfan sulfate 600 ng/µl
Endrin 200 ng/µl
Endrin aldehyde 600 ng/µl
Heptachlor 100 ng/µl
Heptachlor-endo-epoxide (Isomer A) 100 ng/µl

in ethylacetate 1ml
XA06080100EA GK

in ethylacetate 1ml
LA06080100EA FC
with 10% of concentration indicated

Organochlorine Pesticide Mix 3

Aldrin
alpha-BHC
beta-BHC
gamma-BHC
delta-BHC
4,4'-DDD
4,4'-DDE
4,4'-DDT
Dieldrin
alpha-Endosulfan
beta-Endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor-endo-epoxide (Isomer A)
Methoxychlor

1000 ng/µl each component
in toluene:hexane (1:1) 1ml
YA06170100TH GK

20 ng/µl each component
in toluene:hexane (1:1) 1ml
LA06170100TH FC

EPA Method 610

PAH Mix 61

Acenaphthene 1000 ng/µl
Acenaphthylene 2000 ng/µl
Anthracene 100 ng/µl
Benzo(a)anthracene 100 ng/µl
Benzo(a)pyrene 100 ng/µl
Benzo(b)fluoranthene 200 ng/µl
Benzo(g,h,i)perylene 200 ng/µl
Benzo(k)fluoranthene 100 ng/µl
Chrysene 100 ng/µl
Dibenzo(a,h)anthracene 200 ng/µl
Fluoranthene 200 ng/µl
Fluorene 200 ng/µl
Indeno(1,2,3-cd)pyrene 100 ng/µl
Naphthalene 1000 ng/µl
Phenanthrene 100 ng/µl
Pyrene 100 ng/µl
(16 compounds)

in methanol/acetone 1:1 1ml
XA06100100AM FK

PAH Mix 9

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Chrysene
Dibenzo(a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene

100 ng/µl each component
in acetonitrile 1ml
XA20950900AL FK
in cyclohexane 1 ml
XA20950900CY FK

PAH Mix 63

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(g,h,i)perylene
Chrysene
Dibenzo(a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
(16 compounds)

1000 ng/µl each component
in toluene 1ml
YA06100300TO BCK

PAH Mix 64

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(g,h,i)perylene
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
(17 compounds)

2000 ng/µl each component
in benzene:dichloromethane (1:1) 1ml
YA06100400BD BDK

EPA Method 611

Haloethers Mix 1

4-Bromophenyl phenyl ether
bis(2-Chloroethoxy) methane
bis(2-Chloroethyl) ether
bis(2-Chloroisopropyl) ether
4-Chlorophenyl phenyl ether

2000 ng/µl each component
in methanol 1ml
YA06110100ME EC

200 ng/µl each component
in methanol 1ml
XA06110100ME EC

EPA Method 614

Organophosphor. Pesticide Mix 1

Azinphos methyl
Demeton
Diazinon
Disulfoton
Ethion
Malathion
Parathion-ethyl
Parathion-methyl

200 ng/µl each component
in acetone 1ml
XA06140100AC FC

EPA Method 615

Chlorin. Herbicides Acids Mix 1

2,4-D 100 ng/µl
2,4-DB 100 ng/µl
Dalapon 250 ng/µl
Dicamba 100 ng/µl
Dichlorprop 100 ng/µl
Dinoseb 50 ng/µl
MCPA 10000 ng/µl
MCPP 10000 ng/µl
Fenoprop (Silvex; 2,4,5-TP) 10 ng/µl
2,4,5-T 10 ng/µl

in methanol 1ml
XA06150100ME GK

EPA Method 617

Organochlorine Pesticide Mix 3

Aldrin
alpha-BHC
beta-BHC
gamma-BHC
delta-BHC
4,4'-DDD
4,4'-DDE
4,4'-DDT
Dieldrin
alpha-Endosulfan
beta-Endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor-endo-epoxide (Isomer A)
Methoxychlor

1000 ng/µl each component
in toluene:hexane (1:1) 1ml
YA06170100TH GK

20 ng/µl each component
in toluene:hexane (1:1) 1ml
LA06170100TH FC

EPA Method 619

Triazine Pesticide Mix 1

Ametryn
Atraton
Atrazine
Prometon
Prometryn
Propazine
Secbumeton
Simetryn
Simazine
Terbutylazine
Terbutryn

100 ng/µl each component
in acetone 1ml
XA06190100AC FC

EPA Method 622

Organophosphor. Pesticide Mix 4

Azinphos methyl
Coumaphos
Demeton
Disulfoton
Fensulfthion
Fenthion
Phorate
Bolstar (Sulprophos)
Trichloronate
Tokuthion (Prothiophos)

100 ng/µl each component
in cyclohexane 1ml
XA06220100CY GD

Organophosphor. Pesticide Mix 5

Chlorpyrifos
Chlorpyrifos-methyl
Diazinon
Ethoprop (Ethoprofos)
Ronnell (Fenchlorphos)
Merphos
Parathion-methyl

100 ng/µl each component
in cyclohexane 1ml
XA06220200CY GD

EPA Method 624

EPA 624 Purgeable Mix 7

Bromomethane
Chloroethane
Chloromethane
Vinyl chloride

2000 ng/µl each component
in methanol 1ml
XA06240700ME DC

Purgeable Intern Standard Mix 15

Bromochloromethane
Chlorobenzene D5
1,4-Difluorobenzene

2500 ng/µl each component
in methanol 1ml
YA04000500ME DA

EPA 624 Calibration Mix 2

Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
Dibromochloromethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
Dichloromethane
cis-1,3-Dichloropropene *
trans-1,3-Dichloropropene *
Ethylbenzene
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane

100 ng/µl each component
in methanol 1ml
XA06240200ME DF
* (400ng/µl total 52% cis, 48% trans)

EPA 624 Purgeable Calibr. Mix 3

Benzene
Bromodichloromethane
Bromoform
Carbon tetrachloride
Chlorobenzene
2-Chloroethyl vinyl ether
Chloroform
Dibromochloromethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
trans-1,2-Dichloroethene
Dichloromethane
1,2-Dichloropropane
cis-1,3-Dichloropropene *
trans-1,3-Dichloropropene *
Ethylbenzene
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
(26 compounds)

2000 ng/µl each component
in methanol 1ml
YA06240300ME DF
* (400ng/µl total 52% cis, 48% trans)

EPA Method 624 cont.

EPA 624 Purgeable Mix 4

Carbon tetrachloride
Chlorobenzene
2-Chloroethyl vinyl ether
Chloroform
Dibromochloromethane
1,2-Dichlorobenzene
1,1-Dichloroethane
1,1-Dichloroethene
Dichloromethane
1,2-Dichloropropane
Tetrachloroethene
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
(14 compounds)

2000 ng/µl each component
in methanol 1ml
YA06240400ME CH

EPA 624 Purgeable Mix 6

Benzene
Bromodichloromethane
Bromoform
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichloroethane
trans-1,2-Dichloroethene
cis-1,3-Dichloropropene *
trans-1,3-Dichloropropene *
Ethylbenzene
1,1,2,2-Tetrachloroethane
Toluene
1,1,1-Trichloroethane
(13 compounds)

2000 ng/µl each component
in methanol 1ml
YA06240600ME CH

Surrogate Standards

Benzene D6 YA10535200ME
4-Bromofluorobenzene YA10731000ME
1,2-Dichloroethane D4 YA12422300ME
1,4-Difluorobenzene YA12632000ME
Fluorobenzene YA13781000ME
Pentafluorobenzene YA15974000ME

EPA Method 625

Phenol Mix 604

4-Chloro-3-methyl phenol 2500 ng/µl
2-Chlorophenol 500 ng/µl
2,4-Dichlorophenol 500 ng/µl
2,4-Dimethylphenol 500 ng/µl
2,4-Dinitrophenol 1500 ng/µl
2-Methyl-4,6-dinitrophenol 2500 ng/µl
2-Nitrophenol 500 ng/µl
4-Nitrophenol 2500 ng/µl
Pentachlorophenol 2500 ng/µl
Phenol 500 ng/µl
2,4,6-Trichlorophenol 1500 ng/µl

in methanol 1ml
YA06040100ME DF

Organochlorine Pesticide Mix 1

Aldrin 100 ng/µl
alpha-BHC 100 ng/µl
beta-BHC 100 ng/µl
gamma-BHC 100 ng/µl
delta-BHC 100 ng/µl
4,4'-DDD 600 ng/µl
4,4'-DDE 200 ng/µl
4,4'-DDT 600 ng/µl
Dieldrin 200 ng/µl
alpha-Endosulfan 200 ng/µl
beta-Endosulfan 200 ng/µl
Endosulfan sulfate 600 ng/µl
Endrin 200 ng/µl
Endrin aldehyde 600 ng/µl
Heptachlor 100 ng/µl
Heptachlor-endo-epoxide
(Isomer A) 100 ng/µl

in ethylacetate
1ml XA06080100EA GK

Aniline D5 YA10262600MB
Anthracene D10 YA20520100MB
Benzo(a)anthracene D12 YA20545100MB
Chlordane (technical) YA11200000ME
Camphechlor (Toxaphene) YA10940000HE
Decafluorobiphenyl YA12092500MB
Decafluorotriphenylphosphine YA12093000AC
4,4'-Dibromobiphenyl YA21001500MB
4,4'-Dibromooctafluorobiphenyl YA12240600MB
2,2'-Difluorobiphenyl YA12632500MB
1-Fluoronaphthalene YA13794000MB
2-Fluoronaphthalene YA13794200MB
2-Fluorophenol YA13797000MB
Naphthalene D8 YA20905100MB
Nitrobenzene D5 YA15557100MB
Pentafluorophenol YA15974300MB
Perfluorotributylamine (PFTBA) C 15987500
Phenanthrene D10 YA20920100MB
Phenol D6 YA16025200MB
Pyridine D5 YA16646100MB

EPA Method 627 & 629 & 631

Benfluralin C 10470000
Trifluralin C 17850000
Cyanazine C 11790000
Benomyl C 10490000

EPA Method 8010

Method 8010 replaced by Method 8021

EPA 8010 Halogenated VOC Mix 2

Bromoform
Carbon tetrachloride
Chloroform
Dibromomethane
1,1-Dichloroethane
1,2-Dichloroethane
1,2-Dichloropropane
1,1,1,2-Tetrachloroethane 1,1,2,2-
Tetrachloroethane
Tetrachloroethene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
1,2,3-Trichloropropane

2000 ng/µl each component
in methanol 1ml
YA08010200ME DF

EPA 8010 Halogenated VOC Mix 3

Bromobenzene
Bromodichloromethane
Chlorobenzene
Dibromochloromethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
Dichloromethane (Methylenechloride)
*1,3-Dichloropropene
* (4000ng/µl total 52% cis, 48% trans)

2000 ng/µl each component
in methanol 1ml
YA08010300ME FA

VOC Mix 2

Bromomethane
Chloroethane
Chloromethane
Dichlorodifluoromethane
Trichlorofluoromethane
Vinyl chloride

200 ng/µl each component
in methanol 1ml
XA05020100ME CH

2000 ng/µl each component
in methanol 1ml
YA05020100ME DH

Individual compounds

1,2-Dibromo-3-chloropropane YA12235000ME
1,2-Dibromoethane XA12240000ME

Surrogate Standards

Bromochloromethane YA10720800ME
2-Bromochlorobenzene YA10717000ME
4-Bromochlorobenzene YA10718000ME
4-Bromofluorobenzene YA10731000ME

EPA Method 8020

Method 8020 replaced by Method 8021

Aromatic VOC Mix 1

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

2000 ng/µl each component
in methanol 1ml
YA08020100ME DF

Individual compounds

Styrene YA16982000ME
p-Xylene YA17945200ME

Aromatic VOC Mix 3

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

2000 ng/µl each component
 in methanol 1ml
 YA08020300ME DH

Internal Standard

alpha,alpha,alpha -Trifluorotoluene

2000 ng/µl in methanol 1ml
 YA17846000ME DC

Surrogate Standards

2-Bromochlorobenzene YA10717000ME
 4-Bromochlorobenzene YA10718000ME
 Bromochloromethane YA10720800ME
 4-Bromofluorobenzene YA10731000ME
 1,4-Difluorobenzene YA12632000ME
 Fluorobenzene YA13781000ME

EPA Method 8021

VOC - Mix 6

sec-Butyl benzene
 tert-Butyl benzene
 Chlorobenzene
 4-Chlorotoluene
 2-Chlorotoluene
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 Isopropylbenzene
 n-Propyl benzene
 o-Xylene
 p-Xylene

2000 ng/µl each component
 in methanol 1ml
 YA05020600ME DH

VOC - Mix 5

Benzene
 Bromobenzene
 n-Butyl benzene
 Ethylbenzene
 p-Isopropyl toluene
 Naphthalene
 Styrene
 Toluene
 1,2,3-Trichlorobenzene
 1,2,4-Trichlorobenzene
 1,2,4-Trimethylbenzene
 1,3,5-Trimethylbenzene
 m-Xylene

2000 ng/µl each component
 in methanol 1ml
 YA05020500ME DH

VOC - Mix 4

1,2-Dibromo-3-chloropropane
 1,2-Dibromoethane (EDB)
 1,2-Dichloroethane
 1,2-Dichloropropane
 1,3-Dichloropropane
 1,3-Dichloropropene*
 1,1-Dichloropropene
 Hexachlorobutadiene
 1,1,1,2-Tetrachloroethane
 1,1,2,2-Tetrachloroethane
 1,1,2-Trichloroethane
 Trichloroethylene
 1,2,3-Trichloropropane

2000 ng/µl each component
 in methanol 1ml
 YA05020400ME DH
 *4000 ng/µl total, 52% cis, 48% trans

VOC - Mix 3

Bromochloromethane
 Bromoform
 Carbon tetrachloride
 Chloroform
 Dibromomethane
 1,1-Dichloroethane
 2,2-Dichloropropane
 Tetrachloroethene
 1,1,1-Trichloroethane

2000 ng/µl each component
 in methanol 1ml
 YA05020300ME DH

VOC - Mix 524

Bromodichloromethane
 Dibromochloromethane
 1,1-Dichloroethene
 cis-1,2-Dichloroethene
 trans-1,2-Dichloroethene
 Dichloromethane (Methylene chloride)

2000 ng/µl each component
 in methanol 1ml
 YA05020200ME DH

VOC Mix 2

Bromomethane
 Chloromethane
 Chloroethane
 Dichlorodifluoromethane
 Trichlorofluoromethane
 Vinyl chloride

200 ng/µl each component
 in methanol 1ml
 XA05020100ME CH

2000 ng/µl each component
 in methanol 1ml
 YA05020100ME DH

Individual compound

2-Chloroethyl-vinylether

5000 ng/µl
 in methanol 1ml
 YA11410400ME EC

VOC - Mix 15

Benzene
 Bromobenzene
 Bromochloromethane
 Bromodichloromethane
 Bromoform
 n-Butyl benzene
 sec-Butyl benzene
 tert-Butyl benzene
 Carbon tetrachloride
 Chlorobenzene
 Chloroform
 2-Chlorotoluene
 4-Chlorotoluene
 1,2-Dibromo-3-chloropropane
 Dibromochloromethane
 1,2-Dibromoethane
 Dibromomethane
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 1,1-Dichloroethane
 1,2-Dichloroethane
 1,1-Dichloroethene
 cis-1,2-Dichloroethene
 trans-1,2-Dichloroethene
 Dichloromethane (Methylenechloride)
 1,2-Dichloropropane
 1,3-Dichloropropane
 2,2-Dichloropropane
 1,1-Dichloropropene
 *1,3-Dichloropropene
 Ethylbenzene
 Hexachlorobutadiene
 Isopropylbenzene
 p-Isopropyltoluene
 Naphthalene
 N-Propylbenzene
 Styrene
 1,1,1,2-Tetrachloroethane
 1,1,2,2-Tetrachloroethane
 Tetrachloroethene
 Toluene
 1,2,3-Trichlorobenzene
 1,2,4-Trichlorobenzene
 1,1,1-Trichloroethane
 1,1,2-Trichloroethane
 Trichloroethene
 1,2,3-Trichloropropane
 1,2,4-Trimethylbenzene
 1,3,5-Trimethylbenzene
 m-Xylene
 o-Xylene
 p-Xylene
 (54 compounds)

200 ng/µl each component
 in methanol 1ml
 XA05021500ME HD
 * (400ng/µl total 52% cis, 48% trans)

Internal Standard Solution Mix 16

1-Chloro-2-bromopropane
 Fluorobenzene

2000 ng/µl each component
 in methanol 1ml
 YA05021600ME CE

Surrogate Standards

2-Bromochlorobenzene YA10717000ME
 4-Bromochlorobenzene YA10718000ME
 Bromochloromethane YA10720800ME
 2-Bromo-1-chloropropane YA10722200ME
 1,4-Difluorobenzene YA12632000ME

EPA Method 8030 & 8031 & 8033

| | |
|---------------|--------------|
| Acetonitrile | C 10021000 |
| Acrolein | CA10045000 |
| Acrylonitrile | C 10045500 |
| Acrylonitrile | YA10045500ME |

EPA Method 8040

Phenol Mix 8040A

4-Chloro-3-methylphenol
2,4-Dichlorophenol
2-Methyl-4,6-dinitrophenol (DNOC)
3-Methylphenol (m-Cresol)
2-Nitrophenol
4-Nitrophenol
Pentachlorophenol
Phenol
2,4,6-Trichlorophenol

2000 ng/µl each component
in iso-propanol 1ml
YA08040400IP EH

Phenol Mix 8040B

2-sec-Butyl-4,6-dinitrophenol (Dinoseb)
2-Chlorophenol
2,6-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2-Methylphenol (o-Cresol)
4-Methylphenol (m-Cresol)
2,3,4,6-Tetrachlorophenol
2,4,5-Trichlorophenol

2000 ng/µl each component
in iso-propanol 1ml
YA08040500IP EH

Surrogate Standard Mix 3

2-Fluorophenol
2,4,6-Tribromophenol

2000 ng/µl each component
in iso-propanol 1ml
YA08040300IP CA

EPA Method 8061

Phthalate Esters Mix 1

Bis-(2-ethylhexyl) phthalate
Butyl benzyl phthalate
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate

200 ng/µl each component
in methanol 1ml
XA08060100ME DC

2000 ng/µl each component
in iso-octane 1ml
YA08060100IO DH

2000 ng/µl each component
in methanol 1ml
YA08060100ME FC

Phthalate Esters - Analytes Mix 3

Benzyl benzoate
Bis(2-n-butoxyethyl)phthalate
Bis(2-ethoxyethyl)phthalate
Bis(2-ethylhexyl)phthalate
Bis(2-methoxyethyl)phthalate
Bis(4-Methyl-2-pentyl)phthalate
Butylbenzylphthalate
Diamyl phthalate
Di-n-butyl phthalate
Dicyclohexyl phthalate
Diethyl phthalate
Dihexyl phthalate
Diisobutyl phthalate
Dimethylphthalate
Dinonyl phthalate
Di-n-octyl phthalate
Hexyl-2-ethylhexyl phthalate
(17 Compounds)

1000 ng/µl each component
in hexane 1ml
YA08060300HE HD

Internal Standard

Benzyl benzoate
5000 ng/µl
in hexane 1ml
YA10537700HE CE

Surrogate Standard Mix 5

Dibenzyl phthalate
Diphenyl phthalate
Diphenyl isophthalate

500 ng/µl each component
in acetone 1ml
XA08060500AC DF

EPA Method 8070

Nitrosamines Mix 1

N-Nitroso-dimethylamine
N-Nitroso-diphenylamine
N-Nitroso-di-n-propylamine

2000 ng/µl each component
in methanol 1ml
YA08070100ME DC

EPA Method 8081

Individual Aroclors

| Compound | Cat. No. |
|--------------|--------------|
| Aroclor 1016 | YA20101600CY |
| Aroclor 1221 | YA20122100CY |
| Aroclor 1232 | YA20123200CY |
| Aroclor 1242 | YA20124200CY |
| Aroclor 1248 | YA20124800CY |
| Aroclor 1254 | YA20125400CY |
| Aroclor 1260 | YA20126000CY |

1000 ng/µl
in cyclohexane 1ml
DF each

Organochlorine Pesticide Mix 2

Aldrin
alpha-BHC
beta-BHC
gamma-BHC
delta-BHC
4,4'-DDD
4,4'-DDE
4,4'-DDT
Dieldrin
alpha-Endosulfan
beta-Endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Endrin ketone
Heptachlor
Heptachlor-endo-epoxide (Isomer A)
Methoxychlor
(18 compounds)

2000 ng/µl each component
in toluene:hexane (1:1) 1ml
YA08080100TH GK

Single Column Analytes Mix 4

Aldrin
alpha-BHC
beta-BHC
gamma-BHC
delta-BHC
alpha-Chlordane
gamma-Chlordane
4,4'-DDD
4,4'-DDE
4,4'-DDT
Dieldrin
alpha-Endosulfan
beta-Endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Endrin ketone
Heptachlor
Heptachlor-endo-epoxide (Isomer A)
Methoxychlor
(20 Compounds)

100 ng/µl each component
in toluene:hexane (1:1) 1ml
XA08080400TH GD

2000 ng/µl each component
in toluene:hexane (1:1) 1ml
YA08080400TH LE

Single Component Standards

Campechlor (Toxaphene)
4000 ng/µl in hexane 1ml
YA10940000HE DA

Chlordane (technical)
2000 ng/µl in methanol 1ml
YA11200000ME CH

Surrogate Standard Mix 9

Tetrachloro-m-xylene
Decachlorobiphenyl

200 ng/µl each component
in acetone 1ml
XA08080900AC CE

Surrogate Standard Mix 10

Dibutylchorendate
2,4,5,6-Tetrachloro-m-xylene

2000 ng/µl each component
in toluene:hexane 50:50 1ml
YA08081000TH DC

DDT Endrin Mix 1

4,4'-DDT
Endrin

500 ng/µl each component
in methanol 1ml
YA08080800ME CC

Single Surrogate Standards

Dibutyl chlorendate XA11242500AL
2,4,5,6-Tetrachloro-m-xylene XA17382500ME
PCB No. 209 X 20020900IO

Internal Standards

Quintozene (Pentachloronitrobenzene/
PCNB) 100 ng/µl in cyclohexane 1ml
XA16730000CY CH

alpha-alpha'-Dibromo-m-xylene
100 ng/µl in acetone 1ml
XA12246000AC CH

EPA Method 8090

EPA 8090 Mix 1

1,3-Dinitrobenzene
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Isophorone
1,4-Naphtoquinone
Nitrobenzene

2000 ng/µl
in n-hexane:acetone 94:6 1ml
YA08090100HA EC

Surrogate Standard

2-Fluorobiphenyl

2000 ng/µl
in cyclohexane 1ml
YA13785000CY DF

EPA Method 8100

PAH Mix 63

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(g,h,i)perylene
Chrysene
Dibenzo(a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
(16 compounds)

1000 ng/µl each component
in toluene 1ml
YA06100300TO BCK

Surrogate Standards

2-Fluorobiphenyl

2000 ng/µl in cyclohexane 1ml DF
YA13785000CY

1-Fluoronaphthalene

2000 ng/µl in methyl tert butyl ether 1ml DF
YA13794000MB

EPA Method 8110

Haloethers Mix 1

4-Bromophenylphenyl ether
bis(2-Chloroethoxy) methane
bis(2-Chloroethyl) ether
bis(2-Chloroisopropyl) ether 4-
Chlorophenylphenyl ether

2000 ng/µl each component
in methanol 1ml
YA06110100ME EC

200 ng/µl each component
in methanol 1ml
XA06110100ME EC

EPA Method 8120

Chlorinated Hydrocarbons Mix 2

2-Chloronaphthalene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Hexachlorobenzene
Hexachloro-1,3-butadiene
Hexachlorocyclopentadiene
Hexachloroethane
1,2,4,5-Tetrachlorobenzene
1,2,4-Trichlorobenzene

2000 ng/µl each component
in n-hexane 1ml
YA08120200HE EH

EPA Method 8150

Chlorin. Herbicides Acids Mix 1

2,4-D 100 ng/µl
2,4-DB 100 ng/µl
Dalapon 250 ng/µl
Dicamba 100 ng/µl
Dichlorprop 100 ng/µl
Dinoseb 50 ng/µl
MCPA 10000 ng/µl
MCPP 10000 ng/µl
Fenoprop (Silvex; 2,4,5-TP) 10 ng/µl
2,4,5-T 10 ng/µl

in methanol 1ml
XA06150100ME GK

Chlorinated Acids Underivatized Mix 2

Acifluorfen 100ng/µl
Bentazon 200ng/µl
Chloramben 100ng/µl
2,4-D 200ng/µl
Dalapon 1300ng/µl
2,4-DB 800ng/µl
DCPA acid (Propanil) 100ng/µl
Dicamba 100ng/µl
Dichloroprop 300ng/µl
3,5-Dichlorobenzoic acid 100ng/µl
Dinoseb 200ng/µl
4-Nitrophenol 100ng/µl
Picloram 100ng/µl
Pentachlorophenol 100ng/µl
2,4,5-T 100ng/µl
2,4,5-TP 100ng/µl

in methanol 1ml
XA05150200ME BBK

Herbicide Methyl Deriv. Mix 4

2,4-D-methyl ester 200ng/µl
Dalapon-methyl ester 200ng/µl
2,4-DB-methyl ester 200ng/µl
Dicamba-methyl ester 200ng/µl
Dichlorprop-methyl ester 200ng/µl
Dinoseb-methyl ether 200ng/µl
MCPA-methyl ester 2000ng/µl
Mecoprop-methyl ester 2000ng/µl
2,4,5-T-methyl ester 200ng/µl
Fenoprop-methyl ester 200ng/µl

in n-hexane 1ml
XA08150400HE FC

Picloram-methyl ester
100 ng/µl in cyclohexane
XA16200500CY 1ml EF

Internal Standards

4,4'-Dibromooctafluorobiphenyl

100 ng/µl in cyclohexane
XA12240600CY 1ml CC

2000 ng/µl in methyl tert butyl ether
YA12240600MB 1ml DF

Surrogate Standard

2,4-Dichlorophenyl acetic acid methyl ester
 100 ng/µl in methyl tert butyl ether
 XA12468500MB 1ml CE
 2000 ng/µl in acetone
 YA12468500AC 1ml DF

EPA Method 8240 & 8260

Aromatic VOC Mix 3

Benzene
 Chlorobenzene
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 Ethylbenzene
 Styrene
 Toluene
 m-Xylene
 o-Xylene
 p-Xylene
 100 ng/µl each component
 in methanol 1ml
 XA08020300ME DH
 2000 ng/µl each component
 in methanol 1ml
 YA08020300ME DH

EPA 8240 VOC-Mix 5

Bromochloromethane
 Bromodichloromethane
 Dibromochloromethane
 1,2-Dibromo-3-chloropropane
 1,2-Dibromoethane
 cis-1,4-Dichloro-2-butene
 trans-1,4-Dichloro-2-butene
 1,1-Dichloroethene
 cis-1,2-Dichloroethene
 trans-1,2-Dichloroethene
 Dichloromethane
 1,3-Dichloropropane
 2,2-Dichloropropane
 1,1-Dichloro-1-propene
 cis-1,3-Dichloropropene
 trans-1,3-Dichloropropene
 2000 ng/µl each component
 in methanol 1ml
 YA08240500ME EA

EPA 8240 VOC-Mix 6

Acetone
 Acetonitrile
 Acrylonitrile
 2-Butanone
 2-Hexanone
 2-Methyl-1-propanol
 4-Methyl-2-pentanone
 2000 ng/µl each component
 in methanol:water (80:20) 1ml
 YA08240600MW CH

EPA 8240 VOC-Mix 8

Allyl chloride
 Benzene
 Chlorobenzene
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 Ethylbenzene
 Ethylmethacrylate
 Methacrylonitrile
 Methylacrylic acid methyl ester
 Propionitrile
 Styrene
 Toluene
 1,2,3-Trichlorobenzene
 m-Xylene
 o-Xylene
 2000 ng/µl each component
 in methanol 1ml
 YA08240800ME EA

EPA 8010 Halogenated VOC Mix 2

Bromoform
 Carbon tetrachloride
 Chloroform
 Dibromomethane
 1,1-Dichloroethane
 1,2-Dichloroethane
 1,2-Dichloropropane
 1,1,1,2-Tetrachloroethane
 1,1,2,2-Tetrachloroethane
 Tetrachloroethene
 1,1,1-Trichloroethane
 1,1,2-Trichloroethane
 Trichloroethene
 1,2,3-Trichloropropane
 2000 ng/µl each component
 in methanol 1ml
 YA08010200ME DF

VOC Mix 2

Bromomethane
 Chloromethane
 Chloroethane
 Dichlorodifluoromethane
 Trichlorofluoromethane
 Vinyl chloride
 200 ng/µl each component
 in methanol 1ml
 XA05020100ME CH
 2000 ng/µl each component
 in methanol 1ml
 YA05020100ME DH

EPA 8240 VOC-Mix 9

cis-1,4-Dichloro-2-butene
 trans-1,4-Dichloro-2-butene
 cis-1,3-Dichloropropene
 trans-1,3-Dichloropropene
 1,4-Dioxane
 Iodomethane
 Pentachloroethane
 2000 ng/µl each component
 in methanol 1ml
 YA08240900ME EC

EPA 8240 VOC-Mix 10

Allyl chloride
 Ethylmethacrylate
 Methacrylonitrile
 Methylacrylic acid methyl ester
 2-Picoline
 Propionitrile
 Pyridine
 Styrene
 2000 ng/µl each component
 in methanol 1ml
 YA08241000ME EC

Individual VOCs

Acrolein (2-Propenal)
 certified neat 5ml
 CA10045000 DC
 Carbondisulfide
 5000 ng/µl in methanol 1ml
 YA11016000ME EC
 Chloralhydrate
 1000 ng/µl in acetonitrile 1ml
 YA11098000AL CH
 Chloroprene
 100 ng/µl in cyclohexane 1ml
 XA11502000CY CE
 Iodomethane
 certified neat 0.25 g
 CA14343000 CA
 2000 ng/µl in methanol:water 80:20
 YA14343000MW 1ml DF
 Vinylacetate
 certified neat 1ml
 CA17922500 BH

Surrogate Standard Mix 13

4-Bromofluorobenzene
 1,2-Dichloroethane D4
 Toluene D8
 2000 ng/µl each component
 in methanol 1ml
 YA08241300ME DA

Purgeable Intern. Standard Mix 15

Bromochloromethane
 Chlorobenzene D5
 1,4-Difluorobenzene
 2500 ng/µl each component
 in methanol 1ml
 YA04000500ME DA

Matrix Spiking Standard Mix 17

Benzene
 Chlorobenzene
 1,1-Dichloroethene
 Toluene
 Trichloroethene
 25 ng/µl each component
 in methanol 1ml
 LA08241700ME DA

EPA Method 8260

Instrument Performance Check

4-Bromofluorobenzene
2000 ng/µl in methanol
YA10731000ME 1ml
CE

VOC - Mix 20

Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
n-Butyl benzene
tert-Butyl benzene
sec-Butyl benzene
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
2-Chlorotoluene
4-Chlorotoluene
1,2-Dibromo-3-chloropropane
Dibromochloromethane
1,2-Dibromoethane
Dibromomethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
*1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene
p-Isopropyl toluene
dichloromethane
Naphthalene
n-Propyl benzene
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
m-Xylene
o-Xylene
p-Xylene
(59 compounds)

200 ng/µl each component
in methanol 1ml
XA05022000ME HL
* (400 ng/µl total 52% cis, 48% trans)

VOC - Mix 15

Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
n-Butyl benzene
tert-Butyl benzene
sec-Butyl benzene
Carbon tetrachloride
Chlorobenzene
Chloroform
2-Chlorotoluene
4-Chlorotoluene
1,2-Dibromo-3-chloropropane
Dibromochloromethane
1,2-Dibromoethane
Dibromomethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,1-Dichloroethene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
*1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene
p-Isopropyl toluene
dichloromethane
Naphthalene
N-Propyl benzene
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
m-Xylene
o-Xylene
p-Xylene
(53 compounds)

200 ng/µl each component
in methanol 1ml
XA05021500ME HD
* (400 ng/µl total 52% cis, 48% trans)

VOC Mix 2

Bromomethane
Chloromethane
Chloroethane
Dichlorodifluoromethane
Trichlorofluoromethane
Vinyl chloride

200 ng/µl each component
in methanol 1ml
XA05020100ME CH

2000 ng/µl each component
in methanol 1ml
YA05020100ME DH

VOC - Mix 3

Bromochloromethane
Bromoform
Carbon tetrachloride
Chloroform
Dibromomethane
1,1-Dichloroethane
2,2-Dichloropropane
Tetrachloroethene
1,1,1-Trichloroethane

2000 ng/µl each component
in methanol 1ml
YA05020300ME DH

VOC - Mix 4

1,2-Dibromo-3-chloropropane
1,2-Dibromoethane (EDB)
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropane
1,3-Dichloropropene*
1,1-Dichloropropene
Hexachlorobutadiene
1,1,1,2-Tetrachloroethane
1,1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
Trichloroethylene
1,2,3-Trichloropropane

2000 ng/µl each component
in methanol 1ml
YA05020400ME DH
*4000 ng/µl total, 52% cis, 48% trans

VOC - Mix 5

Benzene
Bromobenzene
n-Butyl benzene
Ethylbenzene
p-Isopropyl toluene
Naphthalene
Styrene
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
m-Xylene

2000 ng/µl each component
in methanol 1ml
YA05020500ME DH

VOC - Mix 6

sec-Butyl benzene
tert-Butyl benzene
Chlorobenzene
4-Chlorotoluene
2-Chlorotoluene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Isopropylbenzene
n-Propyl benzene
o-Xylene
p-Xylene

2000 ng/µl each component
in methanol 1ml
YA05020600ME DH

VOC - Mix 524

Bromodichloromethane
 Dibromochloromethane
 1,1-Dichloroethene
 cis-1,2-Dichloroethene
 trans-1,2-Dichloroethene
 Dichloromethane (Methylene chloride)

2000 ng/µl each component
 in methanol 1ml
 YA05020200ME DH

VOC-Mix 42

Acetone
 2-Butanone
 2-Hexanone
 4-Methyl-2-pentanone

2000 ng/µl each component
 in methanol/water9:1 1ml
 YA08240200MW DF

Individual VOCs

Iodomethane
 certified neat
 CA14343000 0.25 g CA

2000 ng/µl in methanol
 YA14343000MW 1ml DF

Acrolein (2-Propenal)
 certified neat
 CA10045000 5ml DC

Vinylacetate
 certified neat
 CA17922500 1ml BH

Purgeable Intern. Standards Mix 4

Chlorobenzene D5
 1,4-Dichlorobenzene D4
 1,4-Difluorobenzene
 Pentafluorobenzene

2000 ng/µl each component
 in methanol 1ml
 YA08260400ME DC

Matrix Spiking Standard Mix 17

Benzene
 Chlorobenzene
 1,1-Dichloroethene
 Toluene
 Trichloroethene

25 ng/µl each component
 in methanol 1ml
 LA08241700ME DA

Surrogate Standard Mix 13

4-Bromofluorobenzene
 1,2-Dichloroethane D4
 Toluene D8

2000 ng/µl each component
 in methanol 1ml
 YA08241300ME DA

Instrument Performance Check Solution

4-Bromofluorobenzene

2000 ng/µl
 in methanol 1ml
 YA10731000ME CE

Matrix Spiking Standard Mix 17

Benzene
 Chlorobenzene
 1,1-Dichloroethene
 Toluene
 Trichloroethene

25 ng/µl each component
 in methanol 1ml
 LA08241700ME DA

250 ng/µl each component
 in methanol 1ml
 XA08241700ME DA

EPA Method 8270

Phenol Mix 15

4-Chloro-3-methylphenol
 2-Chlorophenol
 2,4-Dichlorophenol
 2,6-Dichlorophenol
 2,4-Dimethylphenol
 2,4-Dinitrophenol
 2-Methyl-4,6-dinitrophenol
 2-Nitrophenol
 4-Nitrophenol
 Pentachlorophenol
 Phenol
 2,3,4,6-Tetrachlorophenol
 2,4,6-Trichlorophenol
 (13 compounds)

2000 ng/µl each component
 in methanol 1ml
 YA04001500ME EH

Phenol Mix 19

2-sec-Butyl-4,6-dinitrophenol (Dinoseb)
 4-Chloro-3-methylphenol
 2-Chlorophenol
 2,4-Dichlorophenol
 2,6-Dichlorophenol
 2,4-Dimethylphenol
 2,4-Dinitrophenol
 2-Methyl-4,6-dinitrophenol (DNOC)
 2-Methylphenol
 3-Methylphenol
 4-Methylphenol
 2-Nitrophenol
 4-Nitrophenol
 Pentachlorophenol
 Phenol
 2,3,4,6-Tetrachlorophenol
 2,4,5-Trichlorophenol
 2,4,6-Trichlorophenol
 (18 compounds)

2000 ng/µl each component
 in isopropanol 1ml
 YA08271900IP FC

Benzidine Mix 3

Benzidine
 3,3'-Dichlorobenzidine
 3,3'-Dimethylbenzidine

2000 ng/µl each component
 in methanol 1ml
 YA08270700ME EA

Phthalate Esters Mix 1

Bis-(2-ethylhexyl) phthalate
 Butyl benzyl phthalate
 Diethyl phthalate
 Dimethyl phthalate
 Di-n-butyl phthalate
 Di-n-octyl phthalate

200 ng/µl each component
 in methanol 1ml
 XA08060100ME DC

2000 ng/µl each component
 in methanol 1ml
 YA08060100ME FC

Nitrosamines Mix 1

N-Nitroso-dimethylamine
 N-Nitroso-diphenylamine
 N-Nitroso-di-n-propylamine

2000 ng/µl each component
 in methanol 1ml
 YA08070100ME DC

Chlorinated Hydrocarbons Mix 2

2-Chloronaphthalene
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 Hexachlorobenzene
 Hexachloro-1,3-butadiene
 Hexachlorocyclopentadiene
 Hexachloroethane
 1,2,4,5-Tetrachlorobenzene
 1,2,4-Trichlorobenzene

2000 ng/µl each component
 in n-hexane 1ml
 YA08120200HE EH

Haloethers Mix 1

4-Bromophenyl phenyl ether
 bis(2-Chloroethoxy) methane
 bis(2-Chloroethyl) ether
 bis(2-Chloroisopropyl) ether
 4-Chlorophenyl phenyl ether

2000 ng/µl each component
 in methanol 1ml
 YA06110100ME EC

200 ng/µl each component
 in methanol 1ml
 XA06110100ME EC

Dr. Ehrenstorfer Reference Materials

EPA 8090 Mix 1

1,3-Dinitrobenzene
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Isophorone
1,4-Naphtoquinone
Nitrobenzene

2000 ng/µl
in n-hexane:acetone 94:6 1ml
YA08090100HA EC

Organochlorine Pesticide Mix 2

Aldrin
alpha-BHC
beta-BHC
gamma-BHC
delta-BHC
4,4'-DDD
4,4'-DDE
4,4'-DDT
Dieldrin
alpha-Endosulfan
beta-Endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Endrin ketone
Heptachlor
Heptachlor-endo-epoxide (Isomer A)
Methoxychlor
(18 compounds)

2000 ng/µl each component
in toluene:hexane (1:1) 1ml
YA08080100TH GK

Semi-volatile Organic Compounds Mix 8

Aniline
Benzyl alcohol
4-Chloroaniline
Dibenzofuran
2-Methylnaphthalene
2-Naphthylamine
2-Nitroaniline
3-Nitroaniline
4-Nitroaniline
o-Toluidine

2000 ng/µl each component
in methanol 1ml
YA08270800ME FK

Semi-volatile Organic Compounds Mix 9

Acetophenone
2-Acetylaminofluorine
4-Aminobiphenyl
alpha,akpha,alpha-Dimethylphenethylamine
1-Naphthylamine
5-Nitro-o-toluidine
2-Picoline
Pyridine

2000 ng/µl each component
in methanol 1ml
YA08270900ME EH

Semi-volatile Organic Compounds Mix 10

4-Dimethylaminoazobenzene
7,12-dimethylbenz(a)anthracene
Diphenylamine
Hexachloropropylene
Methapyrilene HCl
4-Nitroquinoline-N-oxide
Pentachlorobenzene
Pentachloronitrobenzene
Phenacetin
1,3,5-Trinitrobenzene

2000 ng/µl each component
in methanol:acetone (9:1) 1ml
YA08271000MA FA

Semi-volatile Organic Compounds Mix 11

Chlorobenzilate
Diallate
Ethylmethanesulfonate
Isodrin
Isosafrole
Kepone
3-Methylcholanthrene
Methylmethanesulfonate
Pronamide
Safrole

2000 ng/µl each component
in hexane:acetone (8:2) 1ml
YA08271100HA GD

PAH Mix 64

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(g,h,i)perylene
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
(17 compounds)

2000 ng/µl each component
in benzene:dichloromethane (1:1) 1ml
YA06100400BD BDK

Individual Standards

Chlordane

2000 ng/µl
in methanol 1ml
YA11200000ME CH

Hexachlorophen

5000 ng/µl
in methanol 1ml
YA14180000ME EC

1,4-Phenylenediamine

2000 ng/µl
in acetonitrile 1ml
YA16058000AL DF

Campechlor (Toxaphene)

4000 ng/µl
in hexane 1ml
YA10940000HE DA

Individual Aroclors

| Compound | Cat. No. |
|--------------|--------------|
| Aroclor 1016 | YA20101600CY |
| Aroclor 1221 | YA20122100CY |
| Aroclor 1232 | YA20123200CY |
| Aroclor 1242 | YA20124200CY |
| Aroclor 1248 | YA20124800CY |
| Aroclor 1254 | YA20125400CY |
| Aroclor 1260 | YA20126000CY |

1000 ng/µl 1ml
in cyclohexane DF each

Surrogate Standard Acid Mix 18

2-Fluorophenol
Phenol D6
2,4,6-Tribromophenol

2000 ng/µl each component
in methanol 1ml
YA08271800ME CC

Surrogate Standard Base/Neutrals Mix 19

2-Fluorobiphenyl
Nitrobenzene D5
4-Terphenyl D14

1000 ng/µl each component
in dichloromethane 1ml
YA04001900DI DF

Surrogate Standard Mix 10

Dibutylchorendate
2,4,5,6-Tetrachloro-m-xylene

2000 ng/µl each component
in toluene:hexane 50:50 1ml
YA08081000TH DC

Matrix Spiking Solution Base/Neutrals Mix 27

Acenaphthene
1,4-Dichlorobenzene
2,4-Dinitrotoluene
N-Nitroso-di-n-propylamine
Pyrene
1,2,4-Trichlorobenzene

500 ng/µl each component
in methanol 1ml
XA08272700ME CC

**Matrix Spiking Solution
Acids Mix 28**

4-Chloro-3-methylphenol
2-Chlorophenol
4-Nitrophenol
Pentachlorophenol
Phenol

1000 ng/µl each component
in methanol 10x1ml
YS08272800ME BEK

Calibration Check Mix 31

4-Chloro-3-methylphenol
2,4-Dichlorophenol
2-Nitrophenol
Phenol
Pentachlorophenol
2,4,6-Trichlorophenol

2000 ng/µl each component
in acetone 1ml
YA08273100AC FC

System Perform. Check Mix 32

2,4-Dinitrophenol
Hexachlorocyclopentadiene
4-Nitrophenol
N-Nitroso-di-n-propylamine

2000 ng/µl each component
in methyl-tert. butyl ether 1ml
YA08273200MB DF

Tuning Standard Mix 25

4,4'-Benzidine
4,4'-DDT
Decafluorotriphenylphosphine (DFTPP)
Pentachlorophenol

500 ng/µl each component
in acetonitrile 1ml
XA08272500AL DA

**GC/MS Calibration &
Tuning Standards**

4,4'-Benzidine

100 ng/µl
in acetonitrile 1ml
XA10536000AL DC

Pentachlorophenol

100 ng/µl
in methanol 1ml
XA15970000ME CE

Decafluorotriphenylphosphine (DFTPP)

1000 ng/µl
in acetone 1ml
YA12093000AC CE

Perfluorotributylamine (PFTBA)
C 15987500 0.1 g CH

Internal Standards Mix 26

Acenaphthene D10
Chrysene D12
1,4-Dichlorobenzene D4
Naphthalene D8
Perylene D12
Phenanthrene D10

4000 ng/µl each component
in dichloromethane 1ml
YA08272600DI HL

Internal Standards Mix 33

Acenaphthene D10
Chrysene D12
1,4-Dichlorobenzene D4
Naphthalene D8
Perylene D12
Phenanthrene D10

2000 ng/µl each component
in toluene 1ml
YA08273300TO EA

2000 ng/µl each component
in toluene 10ml
Y 08273300TO DBA

**Semi-volatile Organic
Compounds Mix 2**

Azobenzene
2-Chloronaphthalene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Isophorone
Nitrobenzene
1,2,4-Trichlorobenzene

2000 ng/µl each component
in dichloromethane 1ml
YA08270200DI HL

EPA Method 8310

PAH Mix 50 - (US EPA 16)

Acenaphthene 1000 ng/µl
Acenaphthylene 1000 ng/µl
Anthracene 50 ng/µl
Benzo(a)anthracene 1 ng/µl
Benzo(a)pyrene 5 ng/µl
Benzo(b)fluoranthene 1 ng/µl
Benzo(g,h,i)perylene 5 ng/µl
Benzo(k)fluoranthene 1 ng/µl
Chrysene 50 ng/µl
Dibenzo(a,h)anthracene 10 ng/µl
Fluoranthene 50 ng/µl
Fluorene 100 ng/µl
Indeno(1,2,3-cd)pyrene 10 ng/µl
Naphthalene 1000 ng/µl
Phenanthrene 50 ng/µl
Pyrene 50 ng/µl

in acetonitrile 1ml
XA05500100AL LE

PAH Mix 14

Mix of PAHs for US EPA Method 610 plus 1-Methylnaphthalene and 2-Methylnaphthalene

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(g,h,i)perylene
Benzo(a)pyrene
Chrysene
Dibenz(a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3,c,d)pyrene
1-Methylnaphthalene
2-Methylnaphthalene
Naphthalene
Phenanthrene
Pyrene

10 ng/µl each component
in acetonitrile or cyclohexane
(please specify solvent)
L 20951400AL 10ml BHL
L 20951400CY 10ml BHL

PAH Mix 61

Acenaphthene 1000 ng/µl
Acenaphthylene 2000 ng/µl
Anthracene 100 ng/µl
Benzo(a)anthracene 100 ng/µl
Benzo(a)pyrene 100 ng/µl
Benzo(b)fluoranthene 200 ng/µl
Benzo(g,h,i)perylene 200 ng/µl
Benzo(k)fluoranthene 100 ng/µl
Chrysene 100 ng/µl
Dibenzo(a,h)anthracene 200 ng/µl
Fluoranthene 200 ng/µl
Fluorene 200 ng/µl
Indeno(1,2,3-cd)pyrene 100 ng/µl
Naphthalene 1000 ng/µl
Phenanthrene 100 ng/µl
Pyrene 100 ng/µl
(16 compounds)

in methanol/acetone 1:1 1ml
XA06100100AM FK

EPA Method 8330

Nitroaromate-Explosive Mix 1

1,3-Dinitrobenzene
2,4-Dinitrotoluene
Hexogen (RDX)
Nitrobenzene
Oktogen (HMX)
1,3,5-Trinitrobenzene (TNB)
2,4,6-Trinitrotoluene (TNT)

1000 ng/µl each component
in acetonitrile 1ml
YA08330100AL LE

100 ng/µl each component
in acetonitrile 1ml
XA08330100AL GD

Nitroaromate-Explosive Mix 2

2-Amino-4,6-dinitrotoluene
4-Amino-2,6-dinitrotoluene
2,6-Dinitrotoluene
2-Nitrotoluene
3-Nitrotoluene
4-Nitrotoluene
Tetryl

1000 ng/µl each component
in acetonitrile 1ml
YA08330200AL LE

100 ng/µl each component
in acetonitrile 1ml
XA08330200AL DF

Contract Laboratory Program - CLP

Aromatic Hydrocarbons Mix 11

Benzene
Ethyl benzene
Toluene
m-Xylene
o-Xylene
p-Xylene

2000 ng/µl each component
in methanol 1ml
YA04000100ME DA

Volatiles Mix 13

Acetone
Benzene
Bromodichloromethane
Bromoform
2-Butanone
Carbon disulphide
Carbon tetrachloride
Chlorobenzene
Chloroform
Dibromochloromethane
1,2-Dichloroethane
1,1-Dichloroethane
trans-1,2-Dichloroethene
cis-1,2-Dichloroethene
1,1-Dichloroethene
Dichloromethane
1,2-Dichloropropane
1,3-Dichloropropane*
Ethyl benzene
2-Hexanone
4-Methyl-2-pentanone
Styrene
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
m-Xylene
o-Xylene
p-Xylene
(31 compounds)

200 ng/µl each component
in methanol 1ml
XA04000300ME GD
*400 ng/µl 52%cis, 48%trans

Purgeable Internal Standard Volatiles Mix 15

Bromochloromethane
Chlorobenzene D5
1,4-Difluorobenzene

2500 ng/µl each component
in methanol 1ml
YA04000500ME DA

Surrogate Standard Mix 13

4-Bromofluorobenzene
1,2-Dichloroethane D4
Toluene D8

2000 ng/µl each component
in methanol 1ml
YA08241300ME DA

Instrument Performance Check

4-Bromofluorobenzene

2000 ng/µl
in methanol 1ml
YA10731000ME CE

Toxic Substances Mix 12

Aniline
Benzyl alcohol
4-Chloroaniline
Dibenzofuran
2-Methylnaphthalene
2-Nitroaniline
3-Nitroaniline
4-Nitroaniline

2000 ng/µl each component
in methyl tert. butyl ether 1ml
YA04001200MB FC

CLP - Acid Surrogate Mix 16

2-Chlorophenol D4
2-Fluorophenol
Phenol D6
2,4,6-Tribromophenol

2000 ng/µl each component
in methanol 1ml
YA04001600ME DH

Phenol Mix 15

4-Chloro-3-methyl phenol
2-Chlorophenol
2,4-Dichlorophenol
2,6-Dichlorophenol
2,4-Dimethylphenol
4,6-Dinitro-2-methylphenol
2,4-Dinitrophenol
2-Nitrophenol
4-Nitrophenol
Pentachlorophenol
Phenol
2,3,4,6-Tetrachlorophenol
2,4,6-Trichlorophenol

2000 ng/µl each component
in methanol 1ml
YA04001500ME EH

PAH Mix 64

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(g,h,i)perylene
Carbazole
Chrysene
Dibenzo(a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene
(17 compounds)

2000 ng/µl each component
in benzene:dichloromethane (1:1) 1ml
YA06100400BD BDK

Phenol Mix 5

2-Bromophenol
4-Chloro-3-methylphenol
2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2-Methyl-4,6-dinitrophenol
2-Methylphenol
3-Methylphenol
2-Nitrophenol
4-Nitrophenol
Pentachlorophenol
Phenol
2,3,4,6-Tetrachlorophenol
2,4,6-Trichlorophenol

2500 ng/µl each component
in acetonitrile 1ml
YA19010500AL FA

Acids Surrogate Mix 18

2-Fluorophenol
Phenol D6
2,4,6-Tribromophenol

2000 ng/µl each component
in methanol 1ml
YA04001800ME CH

Base Neutrals Surrogate Standard Mix 19

2-Fluorobiphenyl
Nitrobenzene D5
4-Terphenyl D14

1000 ng/µl each component
in dichloromethane 1ml
YA04001900DI DF

Instrument Check

Decafluorotriphenylphosphine
1000 ng/µl
in acetone 1ml
YA12093000AC CE

Contract Laboratory Program - CLP

Internal Standards Mix 26

Acenaphthene D10
Chrysene D12
1,4-Dichlorobenzene D4
Naphthalene D8
Perylene D12
Phenanthrene D10

4000 ng/µl each component
in dichloromethane 1ml
YA08272600DI HL

Internal Standards Mix 33

Acenaphthene D10
Chrysene D12
1,4-Dichlorobenzene D4
Naphthalene D8
Perylene D12
Phenanthrene D10

2000 ng/µl each component
in toluene 1ml
YA08273300TO EA

2000 ng/µl each component
in toluene 10ml
Y 08273300TO DBA

Individual Aroclors

| Compound | Cat. No. |
|------------------------------|----------------|
| Aroclor 1016 | YA20101600CY |
| Aroclor 1221 | YA20122100CY |
| Aroclor 1232 | YA20123200CY |
| Aroclor 1242 | YA20124200CY |
| Aroclor 1248 | YA20124800CY |
| Aroclor 1254 | YA20125400CY |
| Aroclor 1260 | YA20126000CY |
| 1000 ng/µl in cyclohexane | 1ml DF each |

Surrogate Standard Mix 9

Decachlorobiphenyl
2,4,5,6-Tetrachloro-m-xylene

200 ng/µl each component
in acetone 1ml
XA08080900AC CE

Toxicity Characteristic Leaching Study

Volatile Spiking Mix 1

| | |
|----------------------|-------------|
| Benzene | 5000 ng/µl |
| 2-Butanone | 10000 ng/µl |
| Carbon tetrachloride | 5000 ng/µl |
| Chlorobenzene | 5000 ng/µl |
| Chloroform | 5000 ng/µl |
| 1,4-Dichlorobenzene | 5000 ng/µl |
| 1,2-Dichloroethane | 5000 ng/µl |
| 1,1-Dichloroethene | 5000 ng/µl |
| Tetrachloroethene | 5000 ng/µl |
| Trichloroethene | 5000 ng/µl |

in methanol 1ml
YA04010100ME FC

Vinyl chloride

5000 ng/µl
in methanol 5ml

YA04010200ME CH
YA04010200AC CH

Vinyl acetate

5000 ng/µl
in acetonitrile 1ml

YA17922500AL CH

Pesticide Spiking Solutions

Chlordane Standard

Chlordane

2000 ng/µl
in methanol 1ml
YA11200000ME CH

Toxaphene Standard

Campechlor (Toxaphene)

4000 ng/µl
in hexane 1ml
YA10940000HE DA

CLP GPC Calibration Mix 1

| | |
|------------------------------|--------------|
| Corn oil | 250000 ng/µl |
| bis-(2-ethylhexyl) phthalate | 10000 ng/µl |
| Methoxychlor | 2000 ng/µl |
| Perylene | 200 ng/µl |
| Sulfur | 800 ng/µl |

in dichloromethane 1 ml
XA01650100DI DH
set of 10 ampoules of 1ml each
XS01650100DI BHL

Not enough time for the preparation of multi component mixes?

We can help!

We offer a custom preparation service with free technical support.

Free advice on solubilities, solvent and compound compatibility

See page 5