

# Volatiles

## Volatile Organic Compounds (VOCs)

VOCs are often defined as organic compounds that have a boiling temperature between 50-260 °C, excluding pesticides. Commercially, VOCs are widely used as ingredients in household products. Paints, varnishes, and waxes all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing, and hobby products. Furthermore fuels are entirely made up of organic chemicals.

The fact that these compounds are found in so many common products makes them an extremely common environmental pollutant.

AccuStandard offers a comprehensive line of VOCs including mixes formulated to meet specific regulatory methods. If you don't see a mix that meets your specific needs, please contact our Technical Department who will help you formulate a custom product to meet your particular analytical challenges.

VOC Standards are listed as follows:

- Neats and Single Solutions
- Qualitative Kits
- International Methods
- Selected USEPA Mixes

## USEPA Methods:

AccuStandard offers many more mixes, which can be found on our Website, or in other catalogs, including products for USEPA Methods.

Method	Volatiles Method	Method	Volatiles Method
502	Volatiles (PID/ELCD), Volatile Surrogates & Internal Standards	1666	PMI Volatiles (GC/MS)
503	VOC - Aromatics & Alkenes (PID/ELCD)	8010	Halogenated Volatiles (ELCD)
504	EDB & DBCP (ECD)	8011	EDB & DBCP (GC/MS)
524	Volatiles (GC/MS)	8015B	Non Halogenated Organics (GC/FID)
551	Chlorinated Solvents, Trihalomethanes	8020	Aromatic Volatiles (PID)
556	Carbonyl Compounds (GC/ECD)	8021	Halogenated Volatiles PID/ELCD
601	Purgeable Halocarbons (ELCD)	8030	Acrolein & Acrylonitrile (GC/FID)
602	Purgeable Aromatics (PID)	8031	Acrylonitrile (GC/NPD)
603	Acrolein & Acrylonitrile (FID)	8032	Acrylamide (GC/ECD)
624	Purgeable Volatiles (GC/MS)	8033	Acetonitrile (NPD)

## Volatiles (in 1 mL of solvent, unless otherwise noted)

VOLATILES	CAS NO.	QTY./CONC.	MATRIX	CAT. NO.
Acetonitrile	75-05-8	100 µg/mL	MeOH	APP-9-005
		1 mg/mL	MeOH	APP-9-005-10X
		1 mg/mL	Water	M-8033
		5 mg/mL	MeOH	APP-9-005-50X
		5 mg/mL	2-propanol	AS-E0473
		10 mg/mL	Water	M-8015B/5031-02
Acrylamide	79-06-1	1 mg/mL	MeOH	M-8032
Acrylonitrile	107-13-1	100 µg/mL	MeOH	APP-9-008
		1 mg/mL	MeOH	APP-9-008-10X
		10 mg/mL	MeOH	AS-E0003
		10 mg/mL	Water	M-8015B/5031-04
Allyl chloride	107-05-1	100 µg/mL	MeOH	APP-9-010
		1 mg/mL	MeOH	AS-E0476
		2 mg/mL	MeOH	APP-9-010-20X
n-Amylbenzene	538-68-1	100 mg	Neat	V-001
Benzene	71-43-2	1 gram	Neat	M-502-01N
		100 µg/mL	MeOH	APP-9-015
		0.2 mg/mL	MeOH	M-502-01
		1 mg/mL	MeOH	AS-E0004
		2 mg/mL	MeOH	M-502-01-10X
		20 mg/mL	MeOH	M-502-01-100X
Benzene-d <sub>6</sub>	1076-43-3	0.2 mg/mL	MeOH	M-624-SS-01
		2 mg/mL	MeOH	M-624-SS-01-10X
Benzyl chloride	100-44-7	0.2 mg/mL	MeOH	M-8010-01
		5 mg/mL	AcCN	AS-E0169
		0.2 mg/mL	MeOH	M-624-SS-04
2-Bromo-1-chloropropane	3017-95-6	20 mg/mL	MeOH	M-001R-3
		1 mg/mL	Acetone	M-8081-1S-DC
1-Bromo-2-nitrobenzene	577-19-5	0.2 mg/mL	MeOH	M-624-SS-12
2-Bromochlorobenzene	694-80-4	2 mg/mL	MeOH	M-8020-SS-1
4-Bromochlorobenzene	106-39-8	1 mg/mL	Acetone	AS-E1186
Bromochloroacetonitrile	83463-62-1	5 mg/mL	Acetone	M-551B-1
		100 mg	Neat	K-007N
Bromochloromethane	74-97-5	0.2 mg/mL	MeOH	M-502-03
		2 mg/mL	MeOH	M-502-03-10X
		10 mg/mL	MeOH	AS-E0136
		20 mg/mL	MeOH	M-502-03-100X
		25 µg/mL	MeOH	CLP-004
		100 µg/mL	Acetone	M-551.1-IS
p-Bromofluorobenzene	460-00-4	0.15 mg/mL	MeOH	AS-E0233
		0.2 mg/mL	MeOH	M-624-SS-03
		250 µg/mL	MeOH	CLP-004-10X
		2 mg/mL	MeOH	CLP-004-80X
		2.5 mg/mL	MeOH	CLP-004-100X
		25 mg/mL	MeOH	CLP-004-1000X
		10 mg/mL	Acetone	M-551.1-IS-100X
		100 µg/mL	MeOH	APP-9-032
		0.2 mg/mL	MeOH	M-502-06
Bromomethane	74-83-9	1 mg/mL	AcCN	AS-E0044
		2 mg/mL	MeOH	M-502-06-10X
		20 mg/mL	MeOH	M-502-06-100X

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VOLATILES	CAS NO.	QTY./CONC.	MATRIX	CAT. NO.
Bromobenzene	108-86-1	0.2 mg/mL	MeOH	M-502-02
		2 mg/mL	MeOH	M-502-02-10X
		5 mg/mL	MeOH	AS-E0406
		20 mg/mL	MeOH	M-502-02-100X
Bromodichloromethane	75-27-4	100 mg	Neat	K-008N
		100 µg/mL	MeOH	APP-9-030
		0.2 mg/mL	MeOH	M-502-04
		2 mg/mL	MeOH	M-502-04-10X
		5 mg/mL	MeOH	AS-E0046
		20 mg/mL	MeOH	M-502-04-100X
Bromoform	75-25-2	100 mg	Neat	K-005N
		100 µg/mL	MeOH	APP-9-031
		0.2 mg/mL	MeOH	M-502-05
		2 mg/mL	MeOH	M-502-05-10X
		5 mg/mL	MeOH	AS-E0212
		20 mg/mL	MeOH	M-502-05-100X
		20 mg/mL	Isooctane	M-618-IS
Bromotrichloromethane	75-62-7	100 mg	Neat	K-009N
1,3-Butadiene	106-99-0	0.2 mg/mL	MeOH	S-406A
		2 mg/mL	MeOH	S-406A-10X
iso-Butylbenzene	538-93-2	100 mg	Neat	V-003
n-Butylbenzene	104-51-8	100 mg	Neat	V-002
		0.2 mg/mL	MeOH	M-502-07
		2 mg/mL	MeOH	M-502-07-10X
		5 mg/mL	MeOH	AS-E1105
		20 mg/mL	MeOH	M-502-07-100X
sec-Butylbenzene	135-98-8	100 mg	Neat	V-004
		0.2 mg/mL	MeOH	M-502-08
		2 mg/mL	MeOH	M-502-08-10X
		5 mg/mL	MeOH	AS-E1104
		20 mg/mL	MeOH	M-502-08-100X
tert-Butylbenzene	98-06-6	0.2 mg/mL	MeOH	M-502-09
		2 mg/mL	MeOH	M-502-09-10X
		5 mg/mL	MeOH	AS-E1106
		20 mg/mL	MeOH	M-502-09-100X
Carbon disulfide	75-15-0	100 µg/mL	MeOH	APP-9-035
		2 mg/mL	MeOH	APP-9-035-20X
		5 mg/mL	MeOH	AS-E0363
Carbon tetrabromide	558-13-4	100 mg	Neat	K-006N
Carbon tetrachloride	56-23-5	100 mg	Neat	K-003N
		100 µg/mL	MeOH	APP-9-036
		0.2 mg/mL	MeOH	M-502-10
		2 mg/mL	MeOH	M-502-10-10X
		5 mg/mL	MeOH	AS-E0360
		20 mg/mL	MeOH	M-502-10-100X
Chloral hydrate	302-17-0	1 mg/mL	Acetone	AS-E1179
		1 mg/mL	MeOH	M-E-1179-M
		5 mg/mL	Acetone	M-551B-2
1-Chloro-2-fluorobenzene	348-51-6	2 mg/mL	MeOH	S-163
1-Chloro-3-nitrobenzene	121-73-3	1 mg/mL	Acetone	M-8091-SS-100X
1-Chloro-4-fluorobenzene	352-33-0	0.2 mg/mL	MeOH	M-624-SS-13
Chlorobenzene	108-90-7	100 mg	Neat	A-001
		100 µg/mL	MeOH	APP-9-039
		0.2 mg/mL	MeOH	M-502-11
		1 mg/mL	MeOH	AS-E0006
		2 mg/mL	MeOH	M-502-11-10X
		20 mg/mL	MeOH	M-502-11-100X
		5 mg/mL	MeOH	CLP-PI-3-5X
Chlorobenzene-d <sub>5</sub>	3114-55-4	100 µg/mL	MeOH	APP-9-042
		0.2 mg/mL	MeOH	M-502-12
		1 mg/mL	MeOH	AS-E0015
		2 mg/mL	MeOH	M-502-12-10X
		20 mg/mL	MeOH	M-502-12-100X
Chloroethane	75-00-3	100 µg/mL	MeOH	APP-9-026
		1 mg/mL	MeOH	APP-9-026-M-10X
		2 mg/mL	MeOH	AS-E0041
		5 mg/mL	MeOH	AS-E0041
bis(2-Chloroethoxy)methane	111-91-1	100 µg/mL	CH <sub>2</sub> Cl <sub>2</sub>	APP-9-026
		1 mg/mL	MeOH	APP-9-026-M-10X
		5 mg/mL	MeOH	AS-E0041
		100 mg	Neat	K-002N
		100 µg/mL	MeOH	APP-9-043
		0.2 mg/mL	MeOH	M-502-13
		1 mg/mL	MeOH	AS-E0021
1-Chlorohexane	544-10-5	2 mg/mL	MeOH	M-502-13-10X
		20 mg/mL	MeOH	M-502-13-100X
		0.2 mg/mL	MeOH	M-8010R-1-04
		2 mg/mL	MeOH	M-8010R-1-04-10X
		100 µg/mL	MeOH	APP-9-044
Chloromethane	74-87-3	0.2 mg/mL	MeOH	M-502-14
		5 mg/mL	MeOH	AS-E0043
		2 mg/mL	MeOH	M-502-14-10X
		20 mg/mL	MeOH	M-502-14-100X
		100 µg/mL	MeOH	APP-9-048-R1
Chloroprene	126-99-8	200 µg/mL	MeOH	APP-9-048-R1-2X
		1 mg/mL	MeOH	APP-9-048-R1-10X
		1 mg/mL	MeOH	AS-E0375
3-Chloropropionitrile	542-76-7	1 mg/mL	MeOH	AS-E0375
2-Chlorotoluene	95-49-8	0.2 mg/mL	MeOH	M-502-15

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VOLATILES	CAS NO.	QTY./CONC.	MATRIX	CAT. NO.
		2 mg/mL	MeOH	M-502-15-10X
		5 mg/mL	MeOH	AS-E0150
		20 mg/mL	MeOH	M-502-15-100X
3-Chlorotoluene	108-41-8	5 mg/mL	MeOH	AS-E0151
4-Chlorotoluene	106-43-4	0.2 mg/mL	MeOH	M-502-16
		2 mg/mL	MeOH	M-502-16-10X
		20 mg/mL	MeOH	M-502-16-100X
Cresylic acid	1319-77-3	2 mg/mL	MeOH	FL-0004-CA
Cyclohexane	110-82-7	1 gram	Neat	TK-102-08N
		2 mg/mL	MeOH	TK-102-08S-10X
Decylbenzene	104-72-3	100 mg	Neat	V-005
Diallate (95-98%)		1 mg/mL	AcCN	AS-E0623
Dibromoacetonitrile	3252-43-5	5 mg/mL	Acetone	M-551B-4
Dibromochloromethane	124-48-1	100 mg	Neat	K-010N
		100 µg/mL	MeOH	APP-9-060
		0.2 mg/mL	MeOH	M-502-17
		2 mg/mL	MeOH	M-502-17-10X
		5 mg/mL	MeOH	AS-E0200
		20 mg/mL	MeOH	M-502-17-100X
1,2-Dibromo-3-chloropropane	96-12-8	0.2 mg/mL	MeOH	M-502-18
		2 mg/mL	MeOH	M-502-18-10X
		5 mg/mL	MeOH	AS-E0993
		20 mg/mL	MeOH	M-502-18-100X
1,2-Dibromoethane	106-93-4	100 µg/mL	MeOH	APP-9-214
		0.2 mg/mL	MeOH	M-502-19
		2 mg/mL	MeOH	M-502-19-10X
		5 mg/mL	MeOH	AS-E0171
		20 mg/mL	MeOH	M-502-19-100X
Dibromofluoromethane	1868-53-7	0.2 mg/mL	MeOH	M-8260-SS-2
		2 mg/mL	MeOH	M-8260-SS-2-10X
Dibromomethane	74-95-3	100 mg	Neat	K-004N
		100 µg/mL	MeOH	APP-9-062
		0.2 mg/mL	MeOH	M-502-20
		2 mg/mL	MeOH	M-502-20-10X
		5 mg/mL	MeOH	AS-E1097
		20 mg/mL	MeOH	M-502-20-100X
1,2-Dibromopropane	78-75-1	5 mg/mL	MeOH	M-552-IS
		10 mg/mL	Hexane	M-556-IS
1,2-Dibromo-1,1,2,2-tetrafluoroethane	124-73-2	1000 µg/mL	MeOH	AS-E0463
a,a-Dibromo-m-xylene	626-15-3	1 mg/mL	Acetone	M-8081-IS-X
Dichloroacetonitrile	3018-12-0	5 mg/mL	Acetone	M-551B-5
1,2-Dichlorobenzene	95-50-1	100 mg	Neat	A-002
		100 µg/mL	MeOH	APP-9-064
		0.2 mg/mL	MeOH	M-502-21
		2 mg/mL	MeOH	M-502-21-10X
		5 mg/mL	MeOH	AS-E0023
		20 mg/mL	MeOH	M-502-21-100X
1,3-Dichlorobenzene	541-73-1	100 mg	Neat	A-003
		100 µg/mL	MeOH	APP-9-065
		0.2 mg/mL	MeOH	M-502-22
		1 mg/mL	MeOH	AS-E0214
		2 mg/mL	MeOH	M-502-22-10X
		20 mg/mL	MeOH	M-502-22-100X
1,4-Dichlorobenzene	106-46-7	100 mg	Neat	A-004
		100 µg/mL	MeOH	APP-9-066
		0.2 mg/mL	Acetone	M-8151-IS-2
		0.2 mg/mL	MeOH	M-502-23
		2 mg/mL	MeOH	M-502-23-10X
		5 mg/mL	MeOH	AS-E0025
		20 mg/mL	MeOH	M-502-23-100X
1,2-Dichlorobenzene-d <sub>4</sub>	2199-69-1	0.15 mg/mL	MeOH	AS-E0776
		0.2 mg/mL	MeOH	M-624-SS-11
		2 mg/mL	MeOH	M-624-SS-11-10X
1,4-Dichlorobenzene-d <sub>4</sub>	3855-82-1	2 mg/mL	MeOH	Z-014J-3-M-0.5X
		4 mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	Z-014J-3
1,4-Dichlorobutane	110-56-5	0.2 mg/mL	MeOH	M-624-SS-05
		20 mg/mL	MeOH	M-001R-2
1,4-Dichlorobutane-d <sub>8</sub>	83547-96-0	0.15 mg/mL	MeOH	AS-E0196
trans-1,4-Dichloro-2-butene	110-57-6	100 µg/mL	MeOH	APP-9-068
		2 mg/mL	MeOH	APP-9-068-20X
Dichlorodifluoromethane	75-71-8	100 µg/mL	MeOH	APP-9-069
		0.2 mg/mL	MeOH	M-502-24
		2 mg/mL	MeOH	M-502-24-10X
		5000 µg/mL	MeOH	AS-E0346
		20 mg/mL	MeOH	M-502-24-100X
1,1-Dichloroethane	75-34-3	100 µg/mL	MeOH	APP-9-070
		0.2 mg/mL	MeOH	M-502-25
		1 mg/mL	MeOH	AS-E0012
		2 mg/mL	MeOH	M-502-25-10X
		20 mg/mL	MeOH	M-502-25-100X
1,2-Dichloroethane	107-06-2	1 gram	Neat	M-502-26N

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VOLATILES	CAS NO.	QTY./CONC.	MATRIX	CAT. NO.
		100 µg/mL	MeOH	APP-9-071
		0.2 mg/mL	MeOH	M-502-26
		1 mg/mL	MeOH	AS-E0009
		2 mg/mL	MeOH	M-502-26-10X
		20 mg/mL	MeOH	M-502-26-100X
1,2-Dichloroethane-d <sub>2</sub>	17060-07-0	0.2 mg/mL	MeOH	M-624-SS-06
1,1-Dichloroethene	75-35-4	1 gram	Neat	M-502-27N
		100 µg/mL	MeOH	APP-9-072
		0.2 mg/mL	MeOH	M-502-27
		2 mg/mL	MeOH	M-502-27-10X
		20 mg/mL	MeOH	M-502-27-100X
cis-1,2-Dichloroethene	156-59-2	0.2 mg/mL	MeOH	M-502-28
		2 mg/mL	MeOH	M-502-28-10X
		10 mg/mL	MeOH	AS-E0173
		20 mg/mL	MeOH	M-502-28-100X
trans-1,2-Dichloroethene	156-60-5	100 µg/mL	MeOH	APP-9-073
		0.2 mg/mL	MeOH	M-502-29
		1 mg/mL	MeOH	AS-E0028
		2 mg/mL	MeOH	M-502-29-10X
		20 mg/mL	MeOH	M-502-29-100X
Dichlorofluoromethane	75-43-4	0.2 mg/mL	MeOH	M-502-61
		2 mg/mL	MeOH	M-502-61-10X
		20 mg/mL	MeOH	M-502-61-100X
Dichloromethane	75-09-2	100 mg	Neat	K-001N
		100 µg/mL	MeOH	APP-9-074
		0.2 mg/mL	MeOH	M-502-39
		1 mg/mL	MeOH	AS-E0042
		2 mg/mL	MeOH	M-502-39-10X
		20 mg/mL	MeOH	M-502-39-100X
1,2-Dichloropropane	78-87-5	100 µg/mL	MeOH	APP-9-077
		0.2 mg/mL	MeOH	M-502-30
		1 mg/mL	MeOH	AS-E0030
		2 mg/mL	MeOH	M-502-30-10X
		20 mg/mL	MeOH	M-502-30-100X
1,3-Dichloropropane	142-28-9	0.2 mg/mL	MeOH	M-502-31
		2 mg/mL	MeOH	M-502-31-10X
		5 mg/mL	MeOH	AS-E1109
		20 mg/mL	MeOH	M-502-31-100X
2,2-Dichloropropane	594-20-7	0.2 mg/mL	MeOH	M-502-32
		2 mg/mL	MeOH	M-502-32-10X
		5 mg/mL	MeOH	AS-E1167
		20 mg/mL	MeOH	M-502-32-100X
1,1-Dichloropropene	563-58-6	0.2 mg/mL	MeOH	M-502-33
		2 mg/mL	MeOH	M-502-33-10X
		20 mg/mL	MeOH	M-502-33-100X
1,3-Dichloropropene (cis/trans)	542-75-6	0.2 mg/mL	MeOH	M-502-34
		0.4 mg/mL	MeOH	M-502-34-R
		4 mg/mL	MeOH	M-502-34-R-10X
2,3-Dichloro-1-propene	78-88-6	4.2 mg/mL	MeOH	AS-E0170
cis-1,3-Dichloropropene	10061-01-5	100 µg/mL	MeOH	APP-9-078
trans-1,3-Dichloropropene	10061-02-6	100 µg/mL	MeOH	APP-9-079
1,1-Dichloro-1-propylene (95-98%)		5 mg/mL	MeOH	AS-E1166
cis & trans 1,3-Dichloropropylene		5 mg/mL	MeOH	AS-E0218
2,4-Dichlorotoluene	95-73-8	5 mg/mL	MeOH	AS-E0149
1,2:3,4-Diepoxybutane	1464-53-5	1 mg/mL	AcCN	AS-E0577
m-Diethylbenzene	141-93-5	100 mg	Neat	V-007
o-Diethylbenzene	135-01-3	100 mg	Neat	V-006
p-Diethylbenzene	105-05-5	100 mg	Neat	V-008
		100 µg/mL	Isooctane	M-GRA-ST
1,4-Difluorobenzene	540-36-3	0.2 mg/mL	MeOH	M-624-SS-07
		2 mg/mL	MeOH	M-624-SS-07-10X
1,2-Dimethoxyethane	110-71-4	4 % w/w	Gasoline	M-GRO-BLNK/IS-10ML
1,3-Dimethyl-2-nitrobenzene	81-20-9	0.2 mg/mL	MtBE	M-507-SS
Dimethyl sulfate	77-78-1	1 mg/mL	AcCN	AS-E0389
m-Dinitrobenzene	99-65-0	100 µg/mL	CH <sub>2</sub> Cl <sub>2</sub>	APP-9-089
		1 mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	APP-9-089-10X
		5 mg/mL	MeOH	AS-E0527
Dodecylbenzene	123-01-3	100 mg	Neat	V-009
Epichlorohydrin	106-89-8	5 mg/mL	AcCN	AS-E0258
1,2-Epoxybutane	106-88-7	5 mg/mL	AcCN	AS-E0286
1,2-Epoxypropane (Propylene oxide)		1 mg/mL	AcCN	AS-E0308
Ethyl acetate	141-78-6	10 mg/mL	Water	M-8015B/5031-12
Ethylbenzene	100-41-4	1 gram	Neat	M-502-35N
		100 µg/mL	MeOH	APP-9-104
		0.2 mg/mL	MeOH	M-502-35
		2 mg/mL	MeOH	M-502-35-10X
		10 mg/mL	MeOH	AS-E0036
		20 mg/mL	MeOH	M-502-35-100X
Ethylbenzene-d <sub>10</sub>	25837-05-2	0.2 mg/mL	MeOH	M-624-SS-08
Ethyl methacrylate	97-63-2	100 µg/mL	MeOH	APP-9-105
		1 mg/mL	MeOH	AS-E0687
Ethyl methanesulfonate	62-50-0	100 µg/mL	CH <sub>2</sub> Cl <sub>2</sub>	APP-9-106

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VOLATILES	CAS NO.	QTY./CONC.	MATRIX	CAT. NO.
		1 mg/mL	AcCN	AS-E0456
m-Ethyltoluene	620-14-4	100 mg	Neat	V-031
o-Ethyltoluene	611-14-3	100 mg	Neat	V-010
p-Ethyltoluene	622-96-8	100 mg	Neat	V-011
Ethylene glycol	107-21-1	2 mg/mL	Water	D-4291-93
Ethylene oxide	75-21-8	0.2 mg/mL	Isooctane	S-354-2
		5 mg/mL	Water	M-8015B/5031-14-R1
Ethylene thiourea	96-45-7	0.1 mg/mL	Ethyl acetate	M-509
2-Fluoroacetamide	640-19-7	5 mg/mL	AcCN	AS-E0299
Fluorobenzene	462-06-6	0.15 mg/mL	MeOH	AS-E0232
		0.2 mg/mL	MeOH	M-624-SS-09
		2 mg/mL	MeOH	M-524-IS-2
Fluorotrichloromethane		5 mg/mL	MeOH	AS-E0047
Heptadecylbenzene	14752-75-1	100 mg	Neat	V-014
Heptylbenzene	1078-71-3	100 mg	Neat	V-012
Hexachlorobenzene	118-74-1	100 mg	Neat	A-012
		100 µg/mL	MeOH	APP-9-112
		1 mg/mL	Acetone	AS-E0008
		1 mg/mL	Acetone	M-8091-IS-20X
		2 mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	APP-9-112-D-20X
Hexachlorobutadiene	87-68-3	100 µg/mL	MeOH	APP-9-113
		0.2 mg/mL	MeOH	M-502-36
		2 mg/mL	MeOH	M-502-36-10X
		5 mg/mL	MeOH	AS-E0050
		20 mg/mL	MeOH	M-502-36-100X
Hexachlorocyclopentadiene	77-47-4	100 µg/mL	MeOH	APP-9-114
		1 mg/mL	MeOH	APP-9-114-10X
		1 mg/mL	MeOH	AS-E0051
Hexachloroethane	67-72-1	100 µg/mL	MeOH	APP-9-115
		1 mg/mL	MeOH	AS-E0011
Hexachloropropene	1888-71-7	100 µg/mL	MeOH	APP-9-117
Hexachloropropylene		1 mg/mL	MeOH	AS-E0364
Hexadecylbenzene	1459-09-2	100 mg	Neat	V-015
Hexylbenzene	1077-16-3	100 mg	Neat	V-013
Isopropylbenzene	98-82-8	0.2 mg/mL	MeOH	M-502-37
		2 mg/mL	MeOH	M-502-37-10X
		5 mg/mL	MeOH	AS-E0669
		20 mg/mL	MeOH	M-502-37-100X
p-Isopropyltoluene (p-Cymene)	99-87-6	0.2 mg/mL	MeOH	M-502-38
		2 mg/mL	MeOH	M-502-38-10X
		5 mg/mL	MeOH	AS-E1108
		20 mg/mL	MeOH	M-502-38-100X
Malononitrile	109-77-3	5 mg/mL	MeOH	AS-E0337
Methacrylonitrile	126-98-7	100 µg/mL	MeOH	APP-9-125
		1 mg/mL	MeOH	AS-E0686
Methyl 2-bromopropionate	5445-17-0	1 mg/mL	MtBE	M-552.1-SS-ME
Methyl 2,3-dibromopropionate	1729-67-5	1 mg/mL	MtBE	M-552.2-SS-ME
Methyl iodide	74-88-4	100 µg/mL	MeOH	APP-9-130
Methyl isothiocyanate	556-61-6	25 µg/mL	Acetone	M-1659-RPS
Methyl methacrylate	80-62-6	100 µg/mL	MeOH	APP-9-131
		1 mg/mL	MeOH	AS-E0439
		2 mg/mL	MeOH	APP-9-131-20X
Methyl methanesulfonate	66-27-3	100 µg/mL	CH <sub>2</sub> Cl <sub>2</sub>	APP-9-132
		1 mg/mL	Accn	AS-E0431
Methylene chloride-d <sub>2</sub>	1665-00-5	2 mg/mL	MeOH	M-502-IS-2-3
Nitrobenzene	98-95-3	100 µg/mL	MeOH	APP-9-143
		1 mg/mL	MeOH	APP-9-143-10X
		5 mg/mL	MeOH	AS-E0054
Nitrobenzene-d <sub>5</sub>	4165-60-0	0.2 mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	M-625-13
Nonadecylbenzene	29136-19-4	100 mg	Neat	V-018
Nonylbenzene	1081-77-2	100 mg	Neat	V-017
Octadecylbenzene	929727	100 mg	Neat	V-020
Octylbenzene	2189-60-8	100 mg	Neat	V-019
Pentachlorobenzene	608-93-5	100 mg	Neat	A-011
		100 µg/mL	MeOH	APP-9-173
		2.5 mg/mL	MeOH	AS-E0260
Pentachloroethane	76-01-7	100 µg/mL	MeOH	APP-9-174
		5 mg/mL	MeOH	AS-E0300
Pentadecylbenzene	2131-18-2	100 mg	Neat	V-021
Pentafluorobenzene	363-72-4	0.2 mg/mL	MeOH	M-624-SS-10
1,2-Propanediol	57-55-6	1 mg/mL	AcCN	AS-E0524
Propionic acid	79-09-4	5 mg/mL	AcCN	AS-E0673
Propionitrile	107-12-0	100 µg/mL	MeOH	APP-9-184
		5 mg/mL	MeOH	AS-E0338
		10 mg/mL	Water	M-8015B/5031-25
n-Propylbenzene	103-65-1	100 mg	Neat	V-022
		0.2 mg/mL	MeOH	M-502-41
		2 mg/mL	MeOH	M-502-41-10X
		5 mg/mL	MeOH	AS-E1112
		20 mg/mL	MeOH	M-502-41-100X
Resorcinol	108-46-3	5 mg/mL	MeOH	AS-E0700
Styrene	100-42-5	100 µg/mL	MeOH	APP-9-189

# Volatiles

Volatiles (in 1 mL of solvent, unless otherwise noted)

Individual Volatiles

VOLATILES	CAS NO.	QTY./CONC.	MATRIX	CAT. NO.
		0.2 mg/mL	MeOH	M-502-42
		2 mg/mL	MeOH	M-502-42-10X
		5 mg/mL	MeOH	AS-E0257
		20 mg/mL	MeOH	M-502-42-100X
1,1,1,2-Tetrachloroethane	630-20-6	100 µg/mL	MeOH	APP-9-192
		0.2 mg/mL	MeOH	M-502-43
		1 mg/mL	MeOH	AS-E0335
		2 mg/mL	MeOH	M-502-43-10X
		20 mg/mL	MeOH	M-502-43-100X
1,1,1,2,2-Tetrachloroethane	79-34-5	100 µg/mL	MeOH	APP-9-193
		0.2 mg/mL	MeOH	M-502-44
		2 mg/mL	MeOH	M-502-44-10X
		5 mg/mL	MeOH	AS-E0014
		20 mg/mL	MeOH	M-502-44-100X
1,2,3,4-Tetrachlorobenzene	634-66-2	100 mg	Neat	A-008
		1 mg/mL	MeOH	AS-E0225
1,2,3,5-Tetrachlorobenzene	634-90-2	100 mg	Neat	A-009
1,2,4,5-Tetrachlorobenzene	95-94-3	100 mg	Neat	A-010
		100 µg/mL	MeOH	APP-9-191
		2.5 mg/mL	AcCN	AS-E0177
Tetrachloroethene	127-18-4	100 µg/mL	MeOH	APP-9-194
		0.2 mg/mL	MeOH	M-502-45
		2 mg/mL	MeOH	M-502-45-10X
		5 mg/mL	MeOH	AS-E0083
		20 mg/mL	MeOH	M-502-45-100X
Tetrachloro-m-xylene (TCMX)	877-09-8	5 µg/mL	Acetone	M-8082-SSC-WL-10ML
		100 µg/mL	Hexane	M-8082-SS
		0.2 mg/mL	MeOH	S-279
		1 mg/mL	MeOH	S-279-5X
		1 mg/mL	Hexane	M-8082-SS-10X
Tetradecylbenzene	1459-10-5	100 mg	Neat	V-023
Tetrahydrofuran	109-99-9	0.2 mg/mL	MeOH	S-457S
		1 mg/mL	Water	M-1671A-IS
		2 mg/mL	MeOH	S-457S-10X
1,2,3,4-Tetramethylbenzene	488-23-3	100 mg	Neat	V-024
1,2,3,5-Tetramethylbenzene	527-53-7	100 mg	Neat	V-025
1,2,4,5-Tetramethylbenzene	95-93-2	100 mg	Neat	V-026
Toluene	108-88-3	1 gram	Neat	M-502-46N
		100 µg/mL	MeOH	APP-9-198
		0.2 mg/mL	MeOH	M-502-46
		1 mg/mL	MeOH	AS-E0084
		2 mg/mL	MeOH	M-502-46-10X
		20 mg/mL	MeOH	M-502-46-100X
		3 % w/w	Isocetane	M-GRA-MSR
Toluene-d <sub>8</sub>	2037-26-5	0.25 mg/mL	MeOH	CLP-PS-3
		2.5 mg/mL	MeOH	CLP-PS-3-10X
1,3,5-Tribromobenzene	626-39-1	50 µg/mL	Acetone	M-8121-IS
Trichloroacetonitrile	545-06-2	5 mg/mL	Acetone	M-551B-7
1,1,1-Trichloroethane	71-55-6	1 gram	Neat	M-502-49N
		100 µg/mL	MeOH	APP-9-202
		0.2 mg/mL	MeOH	M-502-49
		1 mg/mL	MeOH	AS-E0010
		2 mg/mL	MeOH	M-502-49-10X
		20 mg/mL	MeOH	M-502-49-100X
1,1,2-Trichloroethane	79-00-5	1 gram	Neat	M-502-50N
		100 µg/mL	MeOH	APP-9-203
		0.2 mg/mL	MeOH	M-502-50
		1 mg/mL	MeOH	AS-E0013
		2 mg/mL	MeOH	M-502-50-10X
		20 mg/mL	MeOH	M-502-50-100X
1,2,3-Trichlorobenzene	87-61-6	100 mg	Neat	A-005
		0.2 mg/mL	MeOH	M-502-47
		2 mg/mL	MeOH	M-502-47-10X
		5 mg/mL	MeOH	AS-E0175
		20 mg/mL	MeOH	M-502-47-100X
1,2,4-Trichlorobenzene	120-82-1	100 mg	Neat	A-006
		100 µg/mL	MeOH	APP-9-201
		0.2 mg/mL	MeOH	M-502-48
		1 mg/mL	MeOH	AS-E0007
		2 mg/mL	MeOH	M-502-48-10X
		20 mg/mL	MeOH	M-502-48-100X
1,3,5-Trichlorobenzene	108-70-3	100 mg	Neat	A-007
		5 mg/mL	MeOH	AS-E0176
Trichloroethene	79-01-6	100 µg/mL	MeOH	APP-9-204
		0.2 mg/mL	MeOH	M-502-51
		1 mg/mL	MeOH	AS-E0085
		2 mg/mL	MeOH	M-502-51-10X
		20 mg/mL	MeOH	M-502-51-100X
Trichlorofluoromethane (Freon #11)	75-69-4	100 µg/mL	MeOH	APP-9-205
		0.2 mg/mL	MeOH	M-502-52
		2 mg/mL	MeOH	M-502-52-10X
		20 mg/mL	MeOH	M-502-52-100X
1,1,2-Trichloropropane	598-77-6	200 µg/mL	MeOH	S-1321B

# Volatiles

Volatiles (in 1 mL of solvent, unless otherwise noted)

VOLATILES	CAS NO.	QTY./CONC.	MATRIX	CAT. NO.
1,2,3-Trichloropropane	96-18-4	100 µg/mL	MeOH	APP-9-208
		0.2 mg/mL	MeOH	M-502-53
		1 mg/mL	MeOH	APP-9-208-10X
		1 mg/mL	MtBE	M-552.1-IS
		1 mg/mL	MtBE	M-552.2-IS
		2 mg/mL	MeOH	M-502-53-10X
		5 mg/mL	MeOH	AS-E0368
		20 mg/mL	MeOH	M-502-53-100X
a,a,a-Trichlorotoluene	98-07-7	0.2 mg/mL	MeOH	M-624-SS-14
Tridecylbenzene	123-02-4	100 mg	Neat	V-027
1,2,3-Trimethylbenzene	526-73-8	100 mg	Neat	V-028
		3 % w/w	Isooctane	M-GRA-FP
1,2,4-Trimethylbenzene	95-63-6	100 mg	Neat	V-029
		0.2 mg/mL	MeOH	M-502-54
		2 mg/mL	MeOH	M-502-54-10X
		5 mg/mL	MeOH	AS-E1107
		20 mg/mL	MeOH	M-502-54-100X
1,3,5-Trimethylbenzene	108-67-8	100 mg	Neat	V-016
		0.2 mg/mL	MeOH	M-502-55
		2 mg/mL	MeOH	M-502-55-10X
		5 mg/mL	MeOH	AS-E1103
		20 mg/mL	MeOH	M-502-55-100X
Undecylbenzene	6742-54-7	100 mg	Neat	V-030
Urethane	51-79-6	5 mg/mL	MeOH	AS-E0306
Vinyl acetate	108-05-4	100 µg/mL	MeOH	APP-9-211 ‡
		1 mg/mL	AcCN	AS-E0327 ‡
		2 mg/mL	MeOH	APP-9-211-20X ‡
Vinyl chloride	75-01-4	100 µg/mL	MeOH	APP-9-212
		0.2 mg/mL	MeOH	M-502-56
		1 mg/mL	MeOH	AS-E0536
		2 mg/mL	MeOH	M-502-56-10X
		20 mg/mL	MeOH	M-502-56-100X
m-Xylene	108-38-3	0.2 mg/mL	MeOH	M-502-58
		1 mg/mL	MeOH	AS-E0202
		2 mg/mL	MeOH	M-502-58-10X
		20 mg/mL	MeOH	M-502-58-100X
o-Xylene	95-47-6	0.2 mg/mL	MeOH	M-502-57
		1 mg/mL	MeOH	AS-E0201
		2 mg/mL	MeOH	M-502-57-10X
		20 mg/mL	MeOH	M-502-57-100X
p-Xylene	106-42-3	0.2 mg/mL	MeOH	M-502-59
		1 mg/mL	MeOH	AS-E0203
		2 mg/mL	MeOH	M-502-59-10X
		20 mg/mL	MeOH	M-502-59-100X
Xylene (total)	1330-20-7	100 µg/mL	MeOH	APP-9-213

‡ To delay premature breakdown of thermally labile products in transit we suggest shipping with a "Cold Pack"

## Kits for Qualitative Analysis & Identification

### Aromatics C<sub>6</sub>-C<sub>16</sub>

**PS-251C** 15 units

Neat at the stated quantities.

(01) Benzene	1 mL
(02) Toluene	2 mL
(03) o-Xylene	2 mL
(04) m-Xylene	2 mL
(05) p-Xylene	2 mL
(06) Ethylbenzene	2 mL
(07) Cumene	2 mL
(08) Mesitylene	2 mL
(09) p-Cymene	2 mL
(10) n-Propylbenzene	2 mL
(11) n-Butylbenzene	2 mL
(12) n-Hexylbenzene	2 mL
(13) n-Octylbenzene	2 mL
(14) n-Decylbenzene	2 mL
(15) BTX Hydrocarbons Mixture PS-25C	2 mL
Neat at the stated weight	
Benzene	21.6%
Toluene	25.2%
m-Xylene	20.1%
o-Xylene	19.0%
p-Cymene	14.1%

### Calibration Mixture

**PS-25C** 1 x 2 mL

Neat at the stated weight % listed above

### Aromatics C<sub>6</sub>-C<sub>9</sub>

**PS-252C** 15 units

2 mL each. Neat.

(01) Toluene	
(02) o-Xylene	
(03) m-Xylene	
(04) p-Xylene	
(05) Ethylbenzene	
(06) Cumene	
(07) Mesitylene	
(08) n-Propylbenzene	
(09) 1,2,4-Trimethylbenzene	
(10) 1,2,3-Trimethylbenzene	
(11) 1-Ethyl-2-Methylbenzene	
(12) 1-Ethyl-3-Methylbenzene	
(13) 1-Ethyl-4-Methylbenzene	
(14) Benzene	
(15) BTX Hydrocarbons Mixture PS-25C	
Neat at the stated weight %.	
Benzene	21.6%
Toluene	25.2%
m-Xylene	20.1%
o-Xylene	19.0%
p-Cymene	14.1%

### Calibration Mixture

**PS-25C** 1 x 2 mL

Neat at the stated weight % listed above

### Chlorobenzenes

**Z-002** Kit (12 x 100 mg)

A-001	Chlorobenzene
A-002	1,2-Dichlorobenzene
A-003	1,3-Dichlorobenzene
A-004	1,4-Dichlorobenzene
A-005	1,2,3-Trichlorobenzene
A-006	1,2,4-Trichlorobenzene
A-007	1,3,5-Trichlorobenzene
A-008	1,2,3,4-Tetrachlorobenzene
A-009	1,2,3,5-Tetrachlorobenzene
A-010	1,2,4,5-Tetrachlorobenzene
A-011	Pentachlorobenzene
A-012	Hexachlorobenzene

### Halomethanes

**Z-019** Kit (10 x 100 mg)

K-001	Dichloromethane
K-002	Chloroform
K-003	Carbon tetrachloride
K-004	Dibromomethane
K-005	Bromoform
K-006	Carbon tetrabromide
K-007	Bromochloromethane
K-008	Bromodichloromethane
K-009	Bromotrichloromethane
K-010	Dibromochloromethane

# Volatiles

## EU Formulations

### DIN 38407-2 Benzene Standard

Scope: Determination of water, waste water and sludge for low volatile halogenated hydrocarbons by GC.

**DIN38407-2-BENZ** 1 x 1 mL  
10 µg/mL each in *n*-Hexane 5 comps.

Hexachlorobenzene  
Pentachlorobenzene  
Pentachloronitrobenzene  
1,2,4,5-Tetrachlorobenzene  
1,2,4-Trichlorobenzene

### DIN 38407-9 Benzene Mix

Scope: Determination of Benzene and Benzene derivatives in water, wastewater and sludge by GC.

**DIN38407-9-BENZ** 1 x 1 mL  
100 µg/mL each in MeOH 8 comps.

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

### DIN EN ISO 10301 - Halogenated VOCs

Scope: Determination of water, waste water and sludge for low volatile halogenated hydrocarbons by GC.

**DINENISO-10301** 1 x 1 mL  
1 µg/mL each in MeOH 17 comps.

Dichloromethane 1,2-Dichloropropane  
Trichloromethane 1,3-Dichloropropane  
Tetrachloromethane 1,3-Dichloropropene  
1,1-Dichloroethane Dibromomethane  
1,2-Dichloroethane Tribromoethene  
1,1,1-Trichloroethane Bromochloromethane  
1,1,2-Trichloroethane Bromodichloromethane  
Trichloroethene Dibromochloromethane  
Tetrachloroethene

## Pacific Rim Methodologies

### Japan Ministry of Health and Welfare Standards

#### Volatile Organic Solution

**JMHW-001** 1 x 1 mL  
**JMHW-001-PAK** 5 x 1 mL  
1000 µg/mL each in MeOH 23 comps.

Benzene 1,2-Dichloropropane  
Bromodichloromethane *cis*-1,3-Dichloropropene  
Bromoform *trans*-1,3-Dichloropropene  
Carbon tetrachloride Tetrachloroethene  
Chloroform Toluene  
Dibromochloromethane 1,1,1-Trichloroethane  
1,4-Dichlorobenzene 1,1,2-Trichloroethane  
1,2-Dichloroethane Trichloroethene  
1,1-Dichloroethene *m*-Xylene  
*cis*-1,2-Dichloroethene *o*-Xylene  
*trans*-1,2-Dichloroethene *p*-Xylene  
Dichloromethane

#### Volatile Organic Solution

**JMHW-002** 1 x 1 mL  
**JMHW-002-PAK** **SAVE** 5 x 1 mL  
2000 µg/mL each in MeOH 16 comps.

Benzene  
Bromodichloromethane  
Bromoform  
Carbon tetrachloride  
Chloroform  
Dibromochloromethane  
1,2-Dichloroethane  
1,1-Dichloroethene  
*cis*-1,2-Dichloroethene  
Dichloromethane  
*cis*-1,3-Dichloropropene  
*trans*-1,3-Dichloropropene  
Tetrachloroethene  
1,1,1-Trichloroethane  
1,1,2-Trichloroethane  
Trichloroethene

#### Volatile Organic Solution B

**JMHW-003** 1 x 1 mL  
**JMHW-003-PAK** **SAVE** 5 x 1 mL  
2000 µg/mL each in MeOH 7 comps.

1,4-Dichlorobenzene  
*trans*-1,2-Dichloroethene  
1,2-Dichloropropane  
Toluene  
*m*-Xylene  
*o*-Xylene  
*p*-Xylene

#### Tuning Solution/Surrogate Standard Mixture

**CLP-004-100X** 1 x 1 mL  
**CLP-004-100X-PAK** **SAVE** 5 x 1 mL  
2.5 mg/mL in MeOH

*p*-Bromofluorobenzene

### Japan Environmental Agency Methods Standards

#### Volatile Organic Solution

**JEAM-001** 1 x 1 mL  
**JEAM-001-PAK** **SAVE** 5 x 1 mL  
1000 µg/mL each in MeOH 12 comps.

Benzene *cis*-1,3-Dichloropropene  
Carbon Tetrachloride *trans*-1,3-Dichloropropene  
1,1-Dichloroethene Tetrachloroethene  
*cis*-1,2-Dichloroethene 1,1,1-Trichloroethane  
Dichloromethane 1,1,2-Trichloroethane  
1,2-Dichloroethane Trichloroethene

#### Internal Standard

**M-524-IS** 1 x 1 mL  
**M-524-IS-PAK** 5 x 1 mL  
2.0 mg/mL each in MeOH 2 comps.

1,2-Dichlorobenzene-*d*<sub>4</sub>  
Fluorobenzene

### Korean Drinking Water Regulations Standards

#### VOC Mix A

**KDWR-001** 1 x 1 mL  
**KDWR-001-PAK** **SAVE** 5 x 1 mL  
100 µg/mL each in MeOH 15 comps.

Benzene Tetrachloroethene  
Bromodichloromethane Toluene  
Bromoform 1,1,1-Trichloroethane  
Chloroform Trichloroethene  
Dibromochloromethane *m*-Xylene  
Ethylbenzene *p*-Xylene  
Dichloromethane *o*-Xylene  
Phenol

#### VOC Mix B

**KDWR-002** 1 x 1 mL  
**KDWR-002-PAK** **SAVE** 5 x 1 mL  
100 µg/mL each in MeOH 8 comps.

Bromodichloromethane  
Bromoform  
Chloroform  
Dibromochloromethane  
Dichloromethane  
Tetrachloroethene  
1,1,1-Trichloroethane  
Trichloroethene

100-41-4:88	141-93-5:88	626-15-3:87	96-12-8:87	20X:86
100-42-5:90	142-28-9:88	626-39-1:90	96-18-4:91	APP-9-036:86
100-44-7:85	1459-09-2:89	630-20-6:90	96-45-7:89	APP-9-039:86
10061-01-5:88	1459-10-5:90	634-66-2:90	97-63-2:88	APP-9-042:86
10061-02-6:88	1464-53-5:88	634-90-2:90	98-06-6:86	APP-9-043:86
103-65-1:89	14752-75-1:89	640-19-7:89	98-07-7:91	APP-9-044:86
104-51-8:86	156-59-2:88	66-27-3:89	98-82-8:89	APP-9-048-R1:86
104-72-3:87	156-60-5:88	67-66-3:86	98-95-3:89	APP-9-048-R1-
105-05-5:88	1665-00-5:89	67-72-1:89	99-65-0:88	10X:86
106-39-8:85	17060-07-0:88	6742-54-7:91	99-87-6:89	APP-9-048-R1-
106-42-3:91	1729-67-5:89	694-80-4:85	A-001:86	2X:86
106-43-4:87	1868-53-7:87	71-43-2:85	A-002:87	APP-9-060:87
106-46-7:87	1888-71-7:89	71-55-6:90	A-003:87	APP-9-062:87
106-88-7:88	2037-26-5:90	74-83-9:85	A-004:87	APP-9-064:87
106-89-8:88	2131-18-2:89	74-87-3:86	A-005:90	APP-9-065:87
106-93-4:87	2189-60-8:89	74-88-4:89	A-006:90	APP-9-066:87
106-99-0:86	2199-69-1:87	74-95-3:87	A-007:90	APP-9-068:87
107-05-1:85	25837-05-2:88	74-97-5:85	A-008:90	APP-9-068-
107-06-2:88	29136-19-4:89	75-00-3:86	A-009:90	20X:87
107-12-0:89	3017-95-6:85	75-01-4:91	A-010:90	APP-9-069:87
107-13-1:85	3018-12-0:87	75-05-8:85	A-011:89	APP-9-070:87
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M-502-33-10X:88	100X:90	M-551.1-IS-	10X:90	V-026:90
M-502-34:88	M-502-48-10X:90	100X:85	M-8082-SSC-WL-	V-027:91
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M-502-38-100X:89	M-502-53:91	M-624-SS-01-10X:85	PS-25C:91	
M-502-38-10X:89	M-502-53-100X:91	M-624-SS-03:85	S-1321B:91	
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M-502-41-10X:89	M-502-56:91	M-624-SS-09:89	S-406A-10X:86	
M-502-42:90	M-502-56-100X:91	M-624-SS-10:89	S-457S:90	
M-502-42-100X:90	M-502-57:91	M-624-SS-11:87	S-457S-10X:90	
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M-502-43-10X:90	M-502-59:91	M-624-SS-14:91	V-002:86	
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M-502-44-100X:90	M-502-61:88	M-8010-01:85	V-004:86	
M-502-44-10X:90	M-502-61-100X:88	M-8010R-1-04:86	V-005:87	
M-502-45:90	M-502-61-10X:88	M-8010R-1-04-10X:86	V-006:88	
M-502-45-100X:90	M-502-61-10X:88	M-8015B/5031-02:85	V-007:88	
M-502-45-10X:90	M-502-61-10X:88	M-8015B/5031-04:85	V-008:88	
M-502-46:90	M-502-61-10X:88	M-8015B/5031-12:88	V-009:88	
M-502-46-100X:90	M-502-61-10X:88	M-8015B/5031-14-R1:89	V-010:89	
M-502-46-10X:90	M-502-61-10X:88	M-8015B/5031-25:89	V-011:89	
M-502-46N:90	M-502-61-10X:88	M-8020-SS-1:85	V-012:89	
M-502-47:90	M-502-61-10X:88	M-8032:85	V-013:89	
M-502-47-100X:90	M-502-61-10X:88	M-8033:85	V-014:89	
M-502-47-10X:90	M-507-SS:88	M-8081-IS-DC:85	V-015:89	
M-502-47-10X:90	M-509:89	M-8081-IS-X:87	V-016:91	
M-502-48:90	M-524-IS-2:89	M-8082-SS:90	V-017:89	
			V-018:89	
			V-019:89	
			V-020:89	
			V-021:89	
			V-022:89	
			V-023:90	
			V-024:90	

# Volatiles

## Chlorinated Organic Volatiles Calibration Standards

Appendix 2, Drinking Water Regulation of May 22, 1986.

**AE-00048** 1 x 1 mL  
100 ng/µL each in MeOH 5 comps.

1,1,1-Trichloroethane	Dichloromethane
Trichloroethene	Tetrachloromethane
Tetrachloroethene	

## Calibration Solutions

Set of 5 ampules with a concentration of 1 ng/µL, 5 ng/µL, 10 ng/µL, 50 ng/µL and 100 ng/µL 1 mL each in MeOH

**AE-00034-CAL-SET** 5 x 1 mL

1,1,1-Trichloroethane

**AE-00035-CAL-SET** 5 x 1 mL

Trichloroethene

**AE-00036-CAL-SET** 5 x 1 mL

Tetrachloroethene

**AE-00037-CAL-SET** 5 x 1 mL

Dichloromethane

**AE-00038-CAL-SET** 5 x 1 mL

Tetrachloromethane

## Volatiles Calibration Curve

### Mix 1

**AE-00039-CAL-SET** 5 x 1 mL  
Set of 5 ampules with a concentration of 1 ng/µL, 5 ng/µL, 10 ng/µL, 50 ng/µL, 100 ng/µL of each component 1 mL each in MeOH 5 comps.

Dichloromethane	1,1,1-Trichloroethane
Tetrachloroethene	Trichloroethene
Tetrachloromethane	

## Volatiles Calibration Curve

### Mix 2

**AE-00040-CAL-SET** 5 x 1 mL  
Set of 5 ampules with a concentration of 1 ng/µL, 5 ng/µL, 10 ng/µL, 50 ng/µL, 100 ng/µL of each component in MeOH 6 comps.

Chloroform	Tetrachloromethane
Dichloromethane	1,1,1-Trichloroethane
Tetrachloroethene	Trichloroethene

## USEPA Method 501

### Method 501 Trihalomethane Analysis by P&T- GC/ECD or PID

<b>M-501</b>		1 x 1 mL
<b>M-501-PAK</b>	<b>SAVE</b>	5 x 1 mL
0.2 mg/mL each in MeOH		4 comps.

Bromoform	Dibromochloromethane
Chloroform	Dichlorobromomethane

## USEPA Method 502 VOCs by PID / ELCD

### 54 Liquid Components

<b>M-502A-R</b>	0.2 mg/mL each in MeOH		1 x 1 mL
<b>M-502A-R-PAK</b>	0.2 mg/mL each in MeOH	<b>SAVE</b>	5 x 1 mL
<b>M-502A-R-10X</b>	2.0 mg/mL each in MeOH		1 x 1 mL
<b>M-502A-R-10X-PAK</b>	2.0 mg/mL each in MeOH	<b>SAVE</b>	5 x 1 mL

Benzene (01)	1,3-Dichlorobenzene (22)	Naphthalene (40)
Bromobenzene (02)	1,4-Dichlorobenzene (23)	<i>n</i> -Propylbenzene (41)
Bromochloromethane (03)	1,1-Dichloroethane (25)	Styrene (42)
Bromodichloromethane (04)	1,2-Dichloroethane (26)	1,1,1,2-Tetrachloroethane (43)
Bromoform (05)	1,1-Dichloroethene (27)	1,1,2,2-Tetrachloroethane (44)
<i>n</i> -Butylbenzene (07)	<i>cis</i> -1,2-Dichloroethene (28)	Tetrachloroethene (45)
<i>sec</i> -Butylbenzene (08)	<i>trans</i> -1,2-Dichloroethene (29)	Toluene (46)
<i>tert</i> -Butylbenzene (09)	1,2-Dichloropropane (30)	1,2,3-Trichlorobenzene (47)
Carbon tetrachloride (10)	1,3-Dichloropropane (31)	1,2,4-Trichlorobenzene (48)
Chlorobenzene (11)	2,2-Dichloropropane (32)	1,1,1-Trichloroethane (49)
Chloroform (13)	1,1-Dichloropropene (33)	1,1,2-Trichloroethane (50)
2-Chlorotoluene (15)	<i>cis</i> -1,3-Dichloropropene (34A) *	Trichloroethene (51)
4-Chlorotoluene (16)	<i>trans</i> -1,3-Dichloropropene (34B) **	1,2,3-Trichloropropane (53)
Dibromochloromethane (17)	Ethylbenzene (35)	1,2,4-Trimethylbenzene (54)
1,2-Dibromo-3-chloropropane (18)	Hexachlorobutadiene (36)	1,3,5-Trimethylbenzene (55)
1,2-Dibromoethane (19)	Isopropylbenzene ( <i>Cumene</i> ) (37)	<i>o</i> -Xylene (57)
Dibromomethane (20)	<i>p</i> -Isopropyltoluene ( <i>p</i> - <i>Cymene</i> ) (38)	<i>m</i> -Xylene (58)
1,2-Dichlorobenzene (21)	Methylene chloride (39)	<i>p</i> -Xylene (59)

\* *cis* (1.06 x conc.)  
\*\* *trans* (0.94 x conc.)

### 6 Gas Components

<b>M-502B</b>	0.2 mg/mL each in MeOH		1 x 1 mL
<b>M-502B-PAK</b>	0.2 mg/mL each in MeOH	<b>SAVE</b>	5 x 1 mL
<b>M-502B-10X</b>	2.0 mg/mL each in MeOH		1 x 1 mL
<b>M-502B-10X-PAK</b>	2.0 mg/mL each in MeOH	<b>SAVE</b>	5 x 1 mL

Bromomethane (06)	Chloromethane (14)	Trichlorofluoromethane (52)
Chloroethane (12)	Dichlorodifluoromethane (24)	Vinyl chloride (56)

### All 60 liquid & gas components in One Convenient Solution

<b>M-502</b>		1 x 1 mL
<b>M-502-PAK</b>	<b>SAVE</b>	5 x 1 mL
0.2 mg/mL each in MeOH		60 comps.
<b>M-502-10X</b>		1 x 1 mL
<b>M-502-10X-PAK</b>	<b>SAVE</b>	5 x 1 mL
2.0 mg/mL each in MeOH		60 comps.

Liquids (54 comps.) plus Gases (6 comps.)

### Technical Note

Solutions containing volatile components (such as gases) should be chilled before opening to ensure gases are in the solution and not the headspace.

Cat. No. M-502 can also be used for USEPA Method 8021B USEPA Method 8260B (GC/MS)

# Volatiles

Volatile Mixtures

## USEPA Method 502 (Continued)

### Mixtures of Internal, Surrogate Standards & Fortification Solutions

#### Internal Standards

**M-502-IS** 1 x 1 mL  
**M-502-IS-PAK** **SAVE** 5 x 1 mL  
 2.0 mg/mL each in MeOH 2 comps.

1-Chloro-2-bromopropane  
 Fluorobenzene

**M-502-IS-2** 1 x 1 mL  
**M-502-IS-2-PAK** **SAVE** 5 x 1 mL  
 2.0 mg/mL each in MeOH 3 comps.

1-Chloro-2-bromopropane  
 Fluorobenzene  
 Methylene chloride-d<sub>2</sub>

**M-524-IS** 1 x 1 mL  
**M-524-IS-PAK** **SAVE** 5 x 1 mL  
 2.0 mg/mL each in MeOH 2 comps.

1,2-Dichlorobenzene-d<sub>4</sub>  
 Fluorobenzene

**M-524-IS-2** 1 x 1 mL  
**M-524-IS-2-PAK** **SAVE** 5 x 1 mL  
 2.0 mg/mL in MeOH

Fluorobenzene

#### Fortification Solution

**M-524-FS** 1 x 1 mL  
**M-524-FS-PAK** **SAVE** 5 x 1 mL  
 2.0 mg/mL each in MeOH 3 comps.

4-Bromofluorobenzene  
 1,2-Dichlorobenzene-d<sub>4</sub>  
 Fluorobenzene

#### Surrogate Standard

**M-524-SS** 1 x 1 mL  
**M-524-SS-PAK** **SAVE** 5 x 1 mL  
 2.0 mg/mL each in MeOH 2 comps.

4-Bromofluorobenzene  
 1,2-Dichlorobenzene-d<sub>4</sub>

**Many other Internal & Surrogate Standards are Available in our EPA Method Supplement.**

This set is designed to offer the best separation of the components

**M-502D/E/F** set of 3 x 1 mL  
 (set includes **M-502D**, **M-502E** & **M-502F**)

#### Mix D

**M-502D** 1 x 1 mL  
 0.2 mg/mL each in MeOH 26 comps.

Benzene  
 Bromobenzene  
 Bromochloromethane  
 Bromoform  
*sec*-Butyl benzene  
 Carbon tetrachloride  
 Chloroethane  
 4-Chlorotoluene  
 Dibromomethane  
 1,2-Dichlorobenzene  
 1,4-Dichlorobenzene  
 1,1-Dichloroethane  
*trans*-1,2-Dichloroethane  
 Dichlorodifluoromethane  
 2,2-Dichloropropane  
 Ethyl benzene  
 Ethylene dibromide  
 Isopropylbenzene  
 Tetrachloroethene  
 1,1,1,2-Tetrachloroethane  
 Toluene  
 1,2,3-Trichlorobenzene  
 1,2,4-Trichlorobenzene  
 Trichloroethene  
 Vinyl chloride  
*o*-Xylene

#### Mix E

**M-502E** 1 x 1 mL  
 0.2 mg/mL each in MeOH 21 comps.

Bromomethane  
 Chlorobenzene  
 Chloromethane  
 2-Chlorotoluene  
 Dibromochloromethane  
 1,3-Dichlorobenzene  
 1,1-Dichloroethane  
 1,2-Dichloroethane  
*cis*-1,2-Dichloroethane  
 1,2-Dichloropropane  
*cis*-1,3-Dichloropropene\*  
*trans*-1,3-Dichloropropene\*\*  
 Hexachlorobutadiene  
 Methylene chloride  
 1,1,1-Trichloroethane  
 1,1,2-Trichloroethane  
 Trichlorofluoromethane  
 Styrene  
 1,2,3-Trichloropropane  
 1,2,4-Trimethylbenzene  
*m*-Xylene \* *cis* (1.06 x conc.)  
 \*\* *trans* (0.94 x conc.)

#### Mix F

**M-502F** 1 x 1 mL  
 0.2 mg/mL each in MeOH 13 comps.

Bromodichloromethane  
*n*-Butyl benzene  
*tert*-Butyl benzene  
 Chloroform  
 1,2-Dibromo-3-chloropropane  
 1,3-Dichloropropane  
 1,1-Dichloropropene  
*p*-Isopropyl toluene  
 Naphthalene  
*n*-Propyl benzene  
 1,1,2,2-Tetrachloroethane  
 1,3,5-Trimethyl benzene  
*p*-Xylene

## SDWA Volatiles

The U.S. Safe Drinking Water Act (SDWA) amendment of 1996 established a new charter for the Nation's public water systems, individual States and the U.S. EPA in protecting the safety of drinking water. The regulatory section of this act eliminates the requirement for the EPA to regulate 25 additional contaminants every three years. Instead, every 5 years from enactment of the amendment, the EPA will determine whether or not to regulate at least 5 new contaminants from a list being published within 18 months of the enactment of the amendment. The following two pages of National Primary Drinking Water Standards are formulated to provide convenience and flexibility when analyzing regulated contaminants from the Drinking Water Priority list.

### Phase I VOCs

**M-502C-07** 1 x 1 mL  
 2.0 mg/mL each in MeOH 12 comps.

Benzene	1,4-Dichlorobenzene
Bromodichloromethane	1,2-Dichloroethane
Bromoform	1,1-Dichloroethylene
Carbon tetrachloride	1,1,1-Trichloroethane
Chloroform	Trichloroethylene
Dibromochloromethane	Vinyl chloride

### Phase V Additions

**M-502C-10** 1 x 1 mL  
 2.0 mg/mL in MeOH 3 comps.

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

### Phase II VOCs

**M-502C-08** 1 x 1 mL  
 2.0 mg/mL each in MeOH 12 comps.

Chlorobenzene	Styrene
1,2-Dichlorobenzene	Tetrachloroethylene
<i>cis</i> -1,2-Dichloroethylene	Toluene
<i>trans</i> -1,2-Dichloroethylene	<i>o</i> -Xylene
1,2-Dichloropropane	<i>m</i> -Xylene
Ethylbenzene	<i>p</i> -Xylene

### Phase VIB Additions

**M-502C-11** 1 x 1 mL  
 2.0 mg/mL each in MeOH 7 comps.

Acrylonitrile	Hexachlorobutadiene
Bromomethane	1,1,1,2-Tetrachloroethane
<i>cis</i> -1,3-Dichloropropene *	1,2,3-Trichloropropane
<i>trans</i> -1,3-Dichloropropene **	

\* *cis* (1.06 x conc.)  
 \*\* *trans* (0.94 x conc.)

### Combined Phase I, Phase II, Phase V Volatiles

**M-502-REG** 1 x 1 mL  
**M-502-REG-PAK** **SAVE** 5 x 1 mL  
 0.2 mg/mL each in MeOH 27 comps.

Benzene	1,2-Dichloropropane
Bromodichloromethane	Ethylbenzene
Bromoform	Styrene
Carbon tetrachloride	Tetrachloroethylene
Chlorobenzene	Toluene
Chloroform	1,2,4-Trichlorobenzene
Dibromochloromethane	1,1,1-Trichloroethane
1,2-Dichlorobenzene	1,1,2-Trichloroethane
1,4-Dichlorobenzene	Trichloroethylene
1,2-Dichloroethane	Vinyl chloride
1,1-Dichloroethylene	<i>m</i> -Xylene
<i>cis</i> -1,2-Dichloroethylene	<i>o</i> -Xylene
<i>trans</i> -1,2-Dichloroethylene	<i>p</i> -Xylene
Dichloromethane	

**Designed for convenient standard preparation utilizing a single solution.**

# Volatiles

## USEPA Method 503.1 Purgeable Aromatics & Alkenes

<b>M-503</b>		<b>1 x 1 mL</b>
<b>M-503-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL in MeOH		
Benzene	4-Isopropyltoluene	
Bromobenzene	Naphthalene	
<i>n</i> -Butylbenzene	<i>n</i> -Propylbenzene	
<i>sec</i> -Butylbenzene	Styrene	
<i>tert</i> -Butylbenzene	Tetrachloroethene	
Chlorobenzene	Toluene	
2-Chlorotoluene	1,2,3-Trichlorobenzene	
4-Chlorotoluene	1,2,4-Trichlorobenzene	
1,2-Dichlorobenzene	Trichloroethene	
1,3-Dichlorobenzene	1,2,4-Trimethylbenzene	
1,4-Dichlorobenzene	1,3,5-Trimethylbenzene	
Ethylbenzene	<i>o</i> -Xylene	
Hexachlorobutadiene	<i>m</i> -Xylene	
Isopropylbenzene	<i>p</i> -Xylene	

### Internal Standard

<b>M-602-SS</b>		<b>1 x 1 mL</b>
<b>M-602-SS-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL in MeOH		
$\alpha, \alpha, \alpha$ -Trifluorotoluene		

## USEPA Method 504 EDB & DBCP

<b>M-504</b>		<b>1 x 1 mL</b>
<b>M-504-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
1,2-Dibromoethane (EDB)	1,2-Dibromo-3-chloropropane (DBCP)	2 comps.

## USEPA Method 551.1A Chlorinated Solvents, Trihalomethanes Disinfection By-products & Halogenated Pesticides/Herbicides in Drinking Water by GC/ECD

### Chlorinated Organic Solvents + Trihalomethanes

<b>M-551.1A</b>		<b>1 x 1 mL</b>
<b>M-551.1A-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
At stated conc. in Acetone		
	$\mu\text{g/mL}$	$\mu\text{g/mL}$
Bromodichloromethane	1000	1,2-Dibromoethane 1000
Bromoform	1000	Tetrachloroethene 500
Carbon tetrachloride	500	1,1,1-Trichloroethane 1000
Chloroform	1000	1,1,2-Trichloroethane 10,000
Dibromochloromethane	1000	Trichloroethene 1000
1,2-Dibromo-3-chloropropane	1000	1,2,3-Trichloropropane 10,000

### Disinfection By-products

<b>M-551.1B</b>		<b>1 x 1 mL</b>
<b>M-551.1B-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
1000 $\mu\text{g/mL}$ each in Acetone		
Bromochloroacetonitrile	Dichloroacetonitrile	
Chloral hydrate	1,1-Dichloro-2-propanone	
Chloropicrin	Trichloroacetonitrile	
Dibromoacetonitrile	1,1,1-Trichloro-2-propanone	

## USEPA Method 551 Chlorinated Organic Solvents + Trihalomethanes by GC/ECD

<b>M-551A</b>		<b>1 x 1 mL</b>
<b>M-551A-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
5.0 mg/mL each in MeOH		
Bromodichloromethane	1,2-Dibromoethane	
Bromoform	1,2-Dibromo-3-chloropropane	
Carbon tetrachloride	Tetrachloroethene	
Chlorodibromomethane	1,1,1-Trichloroethane	
Chloroform	Trichloroethene	

### Disinfection By-products

<b>M-551B (MIX)</b>		<b>1 x 1 mL</b>
5.0 mg/mL each in Acetone		
<b>M-551B-SET</b>		<b>set of 8 x 1 mL</b>
Each at 5.0 mg/mL in Acetone		
Bromochloroacetonitrile (01)	Dichloroacetonitrile (05)	
Chloral hydrate (02)	1,1-Dichloro-2-propanone (06)	
Chloropicrin (03)	Trichloroacetonitrile (07)	
Dibromoacetonitrile (04)	1,1,1-Trichloro-2-propanone (08)	

## USEPA Method 601 & 602

### Purgeable Halocarbons by Purge & Trap - GC/MS

#### Purgeable Halocarbon Set

<b>M-601</b>		<b>set of 4 x 1 mL</b> (0.2 mg/mL in MeOH)
<b>M-601-10X</b>		<b>set of 4 x 1 mL</b> (2.0 mg/mL in MeOH)
Set Includes M-601A, M-502B, M-601C, M-501		

#### Liquids

<b>M-601A</b>		<b>1 x 1 mL</b>
<b>M-601A-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropylene *	
Chlorobenzene	<i>trans</i> -1,3-Dichloropropylene **	
1,2-Dichlorobenzene	Methylene chloride	
1,3-Dichlorobenzene	1,1,2,2-Tetrachloroethane	
1,4-Dichlorobenzene	Tetrachloroethylene	
1,1-Dichloroethane	1,1,1-Trichloroethane	
1,2-Dichloroethane	1,1,2-Trichloroethane	
1,1-Dichloroethylene	Trichloroethylene	
<i>trans</i> -1,2-Dichloroethylene	* <i>cis</i> (1.06 x conc.)	
1,2-Dichloropropane	** <i>trans</i> (0.94 x conc.)	

#### Gases

<b>M-502B</b>		<b>1 x 1 mL</b>
<b>M-502B-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
Bromomethane	Dichlorodifluoromethane	
Chloromethane	Trichlorofluoromethane	
Chloroethane	Vinyl chloride	

#### Liquid Component

<b>M-601C</b>		<b>1 x 1 mL</b>
<b>M-601C-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL in MeOH		
<b>M-601C-10X</b>		<b>1 x 1 mL</b>
<b>M-601C-10X-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.0 mg/mL in MeOH		
2-Chloroethyl vinyl ether		

#### Trihalomethanes

<b>M-501</b>		<b>1 x 1 mL</b>
<b>M-501-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
Bromoform	Dichlorobromomethane	
Chloroform	Dibromochloromethane	

#### Purgeable Halocarbon Mix

<b>M-601-ASL</b>		<b>1 x 1 mL</b>
<b>M-601-ASL-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
100 $\mu\text{g/mL}$ each in MeOH		
Bromodichloromethane	1,2-Dichloroethane	
Bromoform	1,1-Dichloroethene	
Bromomethane	<i>trans</i> -1,2-Dichloroethene	
Carbon tetrachloride	1,2-Dichloropropane	
Chlorobenzene	<i>cis</i> -1,3-Dichloropropene	
Chloroethane	<i>trans</i> -1,3-Dichloropropene	
Chloroform	Dichloromethane	
Chloromethane	1,1,2,2-Tetrachloroethane	
Dibromochloromethane	Tetrachloroethene	
1,2-Dichlorobenzene	1,1,1-Trichloroethane	
1,3-Dichlorobenzene	1,1,2-Trichloroethane	
1,4-Dichlorobenzene	Trichloroethene	
Dichlorodifluoromethane	Trichlorofluoromethane	
1,1-Dichloroethane	Vinyl chloride	

# Volatiles

Volatile Mixtures

## USEPA Method 601 & 602 (Continued) Purgeable Halocarbons by Purge & Trap - GC/MS

### Purgeable Halocarbons & Aromatics

<b>M-601/602</b>		<b>1 x 1 mL</b>
<b>M-601/602-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
Benzene	1,2-Dichloropropane	
Bromoform	<i>cis</i> -1,3-Dichloropropylene *	
Carbon tetrachloride	<i>trans</i> -1,3-Dichloropropylene **	
Chlorobenzene	Ethylbenzene	
Chloroform	Methylene chloride	
Dibromochloromethane	1,1,2,2-Tetrachloroethane	
1,2-Dichlorobenzene	Tetrachloroethylene	
1,3-Dichlorobenzene	Toluene	
1,4-Dichlorobenzene	1,1,1-Trichloroethane	
Dichlorobromomethane	1,1,2-Trichloroethane	
1,1-Dichloroethane	Trichloroethylene	
1,2-Dichloroethane		
1,1-Dichloroethylene	* <i>cis</i> (1.06 x conc.)	
<i>trans</i> -1,2-Dichloroethylene	** <i>trans</i> (0.94 x conc.)	

### Purgeable Aromatics

<b>M-602</b>		<b>1 x 1 mL</b>
<b>M-602-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
Benzene	1,4-Dichlorobenzene	
Chlorobenzene	Ethylbenzene	
1,2-Dichlorobenzene	Toluene	
1,3-Dichlorobenzene		

### Purgeable Aromatics - Gasoline ID

<b>M-602-GAS</b>		<b>1 x 1 mL</b>
<b>M-602-GAS-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
Benzene	Toluene	
Chlorobenzene	<i>o</i> -Xylene	
1,2-Dichlorobenzene	<i>p</i> -Xylene	
1,3-Dichlorobenzene	<i>m</i> -Xylene	
1,4-Dichlorobenzene	MtBE	
Ethylbenzene		

### Combined 601/602 Purgeable Halocarbon & Aromatic Gasoline ID Mixture with MtBE

<b>M-601-CHG</b>		<b>1 x 1 mL</b>
<b>M-601-CHG-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
100 µg/mL each in MeOH		
Benzene	<i>cis</i> -1,3-Dichloropropene *	
Bromodichloromethane	<i>trans</i> -1,3-Dichloropropene **	
Bromoform	Dichloromethane	
Bromomethane	Ethylbenzene	
Carbon tetrachloride	MtBE	
Chlorobenzene	1,1,2,2-Tetrachloroethane	
Chloroethane	Tetrachloroethene	
Chloroform	Toluene	
Chloromethane	1,1,1-Trichloroethane	
Dibromochloromethane	1,1,2-Trichloroethane	
1,2-Dichlorobenzene	Trichloroethene	
1,3-Dichlorobenzene	Trichlorofluoromethane	
1,4-Dichlorobenzene	<i>m</i> -Xylene	
Dichlorodifluoromethane	<i>o</i> -Xylene	
1,1-Dichloroethane	<i>p</i> -Xylene	
1,2-Dichloroethane	Vinyl chloride	
1,1-Dichloroethene		
<i>trans</i> -1,2-Dichloroethene	* <i>cis</i> (1.06 x conc.)	
1,2-Dichloropropane	** <i>trans</i> (0.94 x conc.)	

### Purgeable Internal Standards

<b>M-001R</b>		<b>1 x 1 mL</b>
<b>M-001R-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
20 mg/ml each in MeOH		
Bromochloromethane	2-Bromo-1-chloropropane	
1,4-Dichlorobutane		

### Surrogate Standard

<b>M-602-SS</b>		<b>1 x 1 mL</b>
<b>M-602-SS-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL in MeOH		
<i>α, α, α</i> -Trifluorotoluene		

## USEPA Method 624 Purgeables by GC/MS

<b>M-624</b>		<b>1 x 1 mL</b>
0.2 mg/mL each in MeOH		31 comps.
Benzene	<i>trans</i> -1,2-Dichloroethene	
Bromodichloromethane	1,2-Dichloropropane	
Bromoform	<i>cis</i> -1,3-Dichloropropene *	
Bromomethane	<i>trans</i> -1,3-Dichloropropene **	
Carbon tetrachloride	Ethylbenzene	
Chlorobenzene	Methylene chloride	
Chloroethane	1,1,2,2-Tetrachloroethane	
2-Chloroethylvinyl ether	Tetrachloroethene	
Chloroform	Toluene	
Chloromethane	1,1,1-Trichloroethane	
Dibromochloromethane	1,1,2-Trichloroethane	
1,2-Dichlorobenzene	Trichloroethene	
1,3-Dichlorobenzene	Trichlorofluoromethane	
1,4-Dichlorobenzene	Vinyl chloride	
1,1-Dichloroethane		
1,2-Dichloroethane	* <i>cis</i> (1.06 x conc.)	
1,1-Dichloroethene	** <i>trans</i> (0.94 x conc.)	

### Surrogates

Each individual solution 0.2 mg/mL in MeOH

Benzene-d <sub>6</sub>	<b>M-624-SS-01</b>	<b>1 x 1 mL</b>
Bromochloromethane	<b>M-624-SS-02</b>	<b>1 x 1 mL</b>
4-Bromofluorobenzene	<b>M-624-SS-03</b>	<b>1 x 1 mL</b>
1-Chloro-2-bromopropane	<b>M-624-SS-04</b>	<b>1 x 1 mL</b>
1,4-Dichlorobutane	<b>M-624-SS-05</b>	<b>1 x 1 mL</b>
1,2-Dichloroethane-d <sub>4</sub>	<b>M-624-SS-06</b>	<b>1 x 1 mL</b>
1,4-Difluorobenzene	<b>M-624-SS-07</b>	<b>1 x 1 mL</b>
Ethylbenzene-d <sub>10</sub>	<b>M-624-SS-08</b>	<b>1 x 1 mL</b>
Fluorobenzene	<b>M-624-SS-09</b>	<b>1 x 1 mL</b>
Pentafluorobenzene	<b>M-624-SS-10</b>	<b>1 x 1 mL</b>
1,2-Dichlorobenzene-d <sub>4</sub>	<b>M-624-SS-11</b>	<b>1 x 1 mL</b>
2-Bromochlorobenzene	<b>M-624-SS-12</b>	<b>1 x 1 mL</b>
4-Chlorofluorobenzene	<b>M-624-SS-13</b>	<b>1 x 1 mL</b>

### Surrogate Standard

<b>M-624-SS-M</b>		<b>1 x 1 mL</b>
<b>M-624-SS-M-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
20 mg/mL each in MeOH		
4-Bromofluorobenzene	Pentafluorobenzene	
Fluorobenzene		

### Internal Standard

<b>M-001R</b>		<b>1 x 1 mL</b>
<b>M-001R-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
20 mg/mL each in MeOH		
Bromochloromethane	2-Bromo-1-chloropropane	
1,4-Dichlorobutane		

## USEPA Method 8010 Halogenated VOCs by GC/ECLD (Hall)

### Purgeable Halocarbons for 8010

<b>M-601</b>	set of 4 x 1 mL (0.2 mg/mL in MeOH)
<b>M-601-10X</b>	set of 4 x 1 mL (2.0 mg/mL in MeOH)
	(set includes <b>M-601A</b> , <b>M-601B</b> , <b>M-601C</b> , <b>M-501</b> )

### Liquids

<b>M-601A</b>		<b>1 x 1 mL</b>
<b>M-601A-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropylene *	
Chlorobenzene	<i>trans</i> -1,3-Dichloropropylene **	
1,2-Dichlorobenzene	Methylene chloride	
1,3-Dichlorobenzene	1,1,2,2-Tetrachloroethane	
1,4-Dichlorobenzene	Tetrachloroethylene	
1,1-Dichloroethane	1,1,1-Trichloroethane	
1,2-Dichloroethane	1,1,2-Trichloroethane	
1,1-Dichloroethylene	Trichloroethylene	
<i>trans</i> -1,2-Dichloroethylene		
1,2-Dichloropropane	* <i>cis</i> (1.06 x conc.)	
	** <i>trans</i> (0.94 x conc.)	

# Volatiles

## USEPA Method 8010, 8010A & 8010B Halogenated VOCs Suitable for Analysis by GC/ECLD (Hall)

### Gases for 8010

<b>M-502B</b>		1 x 1 mL
<b>M-502B-PAK</b>	<b>SAVE</b>	5 x 1 mL
0.2 mg/mL each in MeOH		
Bromomethane	Dichlorodifluoromethane	
Chloromethane	Trichlorofluoromethane	
Chloroethane	Vinyl chloride	

### Liquid Component for 8010

<b>M-601C</b>		1 x 1 mL
<b>M-601C-PAK</b>	<b>SAVE</b>	5 x 1 mL
0.2 mg/mL in MeOH		
2-Chloroethyl vinyl ether		

### Trihalomethanes for 8010

<b>M-501</b>		1 x 1 mL
<b>M-501-PAK</b>	<b>SAVE</b>	5 x 1 mL
0.2 mg/mL each in MeOH		
Bromoform	Dichlorobromomethane	
Chloroform	Dibromochloromethane	

### Additional analytes to Method 8010

<b>M-8010R-1</b>		1 x 1 mL
0.2 mg/mL each in MeOH		
Benzylchloride	4-Chlorotoluene	
Bromobenzene	Dibromomethane	
bis(2-Chloroethoxy)methane	1,1,1,2-Tetrachloroethane	
1-Chlorohexane	1,2,3-Trichloropropane	
Chloromethylmethyl ether		

### Halogenated VOCs by GC/ECLD (Hall)

<b>M-8010A-SET</b>		2 x 1 mL
(set includes <b>M-8010A-M</b> and <b>M-601C</b> )		

### Method 8010A (Methanol Version)

<b>M-8010A-M</b>		1 x 1 mL
0.2 mg/mL each in MeOH		
Benzylchloride	1,2-Dichloroethane	
Bromobenzene	1,1-Dichloroethylene	
Bromoform	<i>trans</i> -1,2-Dichloroethylene	
Bromomethane	1,2-Dichloropropane	
Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropylene *	
Chlorobenzene	<i>trans</i> -1,3-Dichloropropylene **	
Chloroethane	Methylene chloride	
Chloroform	1,1,1,2-Tetrachloroethane	
Chloromethane	1,1,2,2-Tetrachloroethane	
Dibromochloromethane	Tetrachloroethylene	
Dibromomethane	1,1,1-Trichloroethane	
1,2-Dichlorobenzene	1,1,2-Trichloroethane	
1,3-Dichlorobenzene	Trichloroethylene	
1,4-Dichlorobenzene	Trichlorofluoromethane	
Dichlorobromomethane	1,2,3-Trichloropropane	
Dichlorodifluoromethane	Vinyl chloride	
1,1-Dichloroethane		

\* 1.06 times conc.  
\*\* 0.94 times conc.

<b>M-601C</b>		1 x 1 mL
0.2 mg/mL in MeOH		
2-Chloroethyl vinyl ether		

### Technical Note

AccuStandard's R & D Department synthesized Xylene-free Chloroprene. The Chloroprene contains no significant chemical impurities. Method 8010/8020 analytes can now be analyzed simultaneously without affecting the Method 8020 Xylene concentration.

<b>APP-9-048-R1</b>		1 x 1 mL
100 µg/mL in MeOH		
Chloroprene	Xylene-free Chloroprene Standard	

### Surrogate Standard

<b>M-001R</b>		1 x 1 mL
<b>M-001R-PAK</b>	<b>SAVE</b>	5 x 1 mL
20 mg/mL each in MeOH		
Bromochloromethane	2-Bromo-1-chloropropane	
1,4-Dichlorobutane		

### Internal and Surrogate Standard

<b>M-8010-IS/SS</b>		1 x 1 mL
<b>M-8010-IS/SS-PAK</b>	<b>SAVE</b>	5 x 1 mL
150 µg/mL each in MeOH		
4-Bromochlorobenzene	4-Bromofluorobenzene	
Bromochloromethane		

### Mix 2

<b>M-8021B-X1</b>		1 x 1 mL
0.2 mg/mL each in MeOH		
Benzyl chloride	bis(2-Chloroisopropyl)ether	
bis(2-Chloroethoxy)methane	Epichlorohydrin	
2-Chloroethylvinyl ether		

### Halogenated Volatiles

<b>M-8021B-X2</b>		1 x 1 mL
0.2 mg/mL each in Pentane		
Bromoacetone	Chloromethylmethyl ether	

<b>APP-9-030</b>		1 x 1 mL
100 µg/mL in MeOH		
Bromodichloromethane		

<b>APP-9-130</b>		1 x 1 mL
100 µg/mL in MeOH		
Methyl iodide		

# Volatiles

Volatile Mixtures

## USEPA Method 8011 DBCP & EDB by GC/MS

<b>M-504-10X</b>		<b>1 x 1 mL</b>
<b>M-504-10X-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.0 mg/mL each in MeOH		
1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB)		

## USEPA Method 8015A (Rev 1, July 1992) Non-Halogenated Volatile Organics by GC/FID

<b>M-8015A</b>		<b>1 x 1 mL</b>
0.2 mg/mL each in MeOH		
<b>M-8015A-10X</b>		<b>1 x 1 mL</b>
2.0 mg/mL each in MeOH		
Diethyl ether	Methyl ethyl ketone	
Ethanol	Methyl isobutyl ketone	

## Non-Halogenated Volatile Organics

<b>M-8015-ASL</b>		<b>1 x 1 mL</b>
100 µg/mL each in MeOH		
<i>Alternate Source Line</i>		
Acetonitrile	Ethyl methacrylate	
Acrylamide	Isobutyl alcohol	
2-Butanone	Methacrylonitrile	
Diethyl ether	Methyl methacrylate	
1,4-Dioxane	4-Methyl-2-pentanone	
Ethanol	Propionitrile	

## Internal Standard

<b>M-8015B-IS-10X</b>		<b>1 x 1 mL</b>
2.0 mg/mL each in Water		
2-Chloroacrylonitrile	Hexafluoro-2-propanol	
Hexafluoro-2-methyl-2-propanol		

## USEPA Method 8015B Non-Halogenated Organics by GC/FID

**M-8015B/5031-R-SET** set of 27 x 1 mL  
Each at 10 mg/mL in H<sub>2</sub>O

Acetone	M-8015B/5031-01	1 x 1 mL
Acetonitrile	M-8015B/5031-02	1 x 1 mL
Acrolein	M-8015B/5031-03	1 x 1 mL
Acrylonitrile	M-8015B/5031-04	1 x 1 mL
Allyl alcohol	M-8015B/5031-05	1 x 1 mL
1-Butanol	M-8015B/5031-06	1 x 1 mL
†Butanol	M-8015B/5031-07	1 x 1 mL
Crotonaldehyde	M-8015B/5031-08	1 x 1 mL
Diethyl ether	M-8015B/5031-09	1 x 1 mL
p-Dioxane	M-8015B/5031-10	1 x 1 mL
Ethanol	M-8015B/5031-11	1 x 1 mL
Ethyl acetate	M-8015B/5031-12	1 x 1 mL
Ethylene glycol	M-8015B/5031-13	1 x 1 mL
Ethylene oxide (0.5 mg/mL)	M-8015B/5031-14-R1	1 x 1 mL
Isobutyl alcohol	M-8015B/5031-15	1 x 1 mL
Isopropanol	M-8015B/5031-16	1 x 1 mL
Methanol	M-8015B/5031-17	1 x 1 mL
Methyl ethyl ketone	M-8015B/5031-18	1 x 1 mL
4-Methyl-2-pentanone	M-8015B/5031-19	1 x 1 mL
N-Nitrosodi-n-butylamine (0.5 mg/mL)	M-8015B/5031-20	1 x 1 mL
Paraldehyde	M-8015B/5031-21	1 x 1 mL
2-Pentanone	M-8015B/5031-22	1 x 1 mL
2-Picoline	M-8015B/5031-23	1 x 1 mL
1-Propanol	M-8015B/5031-24	1 x 1 mL
Propionitrile	M-8015B/5031-25	1 x 1 mL
Pyridine	M-8015B/5031-26	1 x 1 mL
o-Toluidine	M-8015B/5031-27	1 x 1 mL

## Method 5031 GC/FID Internal Standards for Method 8015B / 5031 Azeotropic Distillation

<b>M-8260/5031-IS-FID</b>		<b>1 x 1 mL</b>
5.0 mg/mL each in H <sub>2</sub> O		
2-Chloroacetonitrile	Hexafluoro-2-propanol	
Hexafluoro-2-methyl-2-propanol		

### Technical Note

**Method 5031** describes the separation procedures for non-purgeable, water soluble and volatile organic compounds in aqueous samples of leachates from solid matrices using azeotropic distillation.

**Method 8015B** is the GC/FID analytical method of analysis. Fuels referenced for analysis by method 8015B

## USEPA Method 8020 Aromatic Volatiles by PID

### Aromatic Volatile Analytes

<b>M-8020-10X</b>		<b>1 x 1 mL</b>
<b>M-8020-10X-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.0 mg/mL each in MeOH		
Benzene	Ethylbenzene	
Chlorobenzene	Toluene	
1,2-Dichlorobenzene	o-Xylene	
1,3-Dichlorobenzene	m-Xylene	
1,4-Dichlorobenzene	p-Xylene	

<b>M-8020B-R1</b>		<b>1 x 1 mL</b>
<b>M-8020B-R1-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.0 mg/mL each in MeOH		

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

### Performance Check Solution

<b>S-078-10X</b>		<b>1 x 1 mL</b>
<b>S-078-10X-PAK</b>		<b>5 x 1 mL</b>
2.0 mg/mL in MeOH		

Methyl t-butyl ether

### Internal Standards

<b>M-8020-IS</b>		<b>1 x 1 mL</b>
<b>M-8020-IS-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
<b>M-8020-IS-10X</b>		<b>1 x 1 mL</b>
<b>M-8020-IS-10X-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.0 mg/mL each in MeOH		

4-Bromofluorobenzene α,α,α-Trifluorotoluene

### Surrogate Standard

<b>M-8020-SS</b>		<b>1 x 1 mL</b>
<b>M-8020-SS-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.0 mg/mL each in MeOH		

4-Bromochlorobenzene Fluorobenzene  
1,4-Difluorobenzene

### Combined ISTD/SS Solution

<b>M-8020-IS/SS-ASL</b>		<b>1 x 1 mL</b>
<b>M-8020-IS/SS-ASL-PAK</b>	<b>SAVE</b>	<b>4 x 1 mL</b>
1.5 mg/mL each in MeOH		

4-Bromochlorobenzene Fluorobenzene  
p-Bromofluorobenzene α,α,α-Trifluorotoluene  
1,4-Difluorobenzene

# Volatiles

## USEPA Method 8021B Purgeable Volatiles by PID/ELCD in Series

### Liquids (see Method 502 for Analyte list)

**M-502A-R** 1 x 1 mL  
0.2 mg/mL each in MeOH 54 comps.

### Gases (see Method 502 for Analyte list)

**M-502B** 1 x 1 mL  
0.2 mg/mL each in MeOH 6 comps.

### Halogenated Volatiles Solution 3

**M-8021B-X1** 1 x 1 mL  
0.2 mg/mL each in MeOH 8 comps.

Allyl chloride bis(2-Chloroisopropyl)ether  
Benzyl chloride Chloroprene  
2-Chloroethanol 1,3-Dichloro-2-propanol  
2-Chloroethyl vinyl ether Epichlorohydrin

This Solution contains  
Xylene-free Chloroprene

### Halogenated Volatiles Solution 4

**M-8021B-X2** 1 x 1 mL  
0.2 mg/mL each in Pentane 2 comps.

Bromoacetone Chloromethyl methyl ether

### Surrogate Standards

**M-8021-SS** 1 x 1 mL  
**M-8021-SS-PAK** SAVE 5 x 1 mL  
2.0 mg/mL each in MeOH 2 comps.

4-Bromochlorobenzene 1,4-Dichlorobutane

**M-8021-SS-M** 1 x 1 mL  
**M-8021-SS-M-PAK** SAVE 5 x 1 mL  
2.0 mg/mL each in MeOH 2 comps.

Bromochloromethane 1,4-Dichlorobutane

**M-001R** 1 x 1 mL  
**M-001R-PAK** SAVE 5 x 1 mL  
20 mg/mL each in MeOH 3 comps.

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

**M-8021A-SS** 1 x 1 mL  
**M-8021A-SS-PAK** SAVE 5 x 1 mL  
20 mg/mL each in MeOH 4 comps.

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

### Chloroprene Solution

**APP-9-048-R1-2X** 1 x 1 mL  
0.2 mg/mL in MeOH

Chloroprene

Xylene-free  
Chloroprene Standard

## USEPA Method 8260B Volatile Organic Compounds by GC/MS

These formulations have been grouped together for a complete 8260B target compound list. M-502-R contains the 54 typical analytes found in this method and a number of other EPA methods. In addition, we have tried to minimize the number of additional standards required to get the complete analyte list, while still addressing the various chromatographic problems associated to specific analytes.

### Liquids (see Method 502 for Analyte list)

**M-502A-R** 1 x 1 mL  
0.2 mg/mL each in MeOH 54 comps.

### Gases (see Method 502 for Analyte list)

**M-502B** 1 x 1 mL  
0.2 mg/mL each in MeOH 6 comps.

### Additional VOC's by Method 8260B

**M-603** 1 x 1 mL  
1.0 mg/mL each in water 2 comps.

Acrolein Acrylonitrile

**M-8240C-R3-10X** 1 x 1 mL  
At stated conc. in MeOH 12 comps.

	mg/mL		mg/mL
Acetonitrile	20	Ethyl methacrylate	2.0
Allyl chloride	2.0	Isobutyl alcohol	40
cis-1,4-Dichloro-2-butene	2.0	Methacrylonitrile	20
trans-1,4-Dichloro-2-butene	2.0	Methyl methacrylate	2.0
1,4-Dioxane	40	Pentachloroethane	2.0
Ethanol	40	Propionitrile	20

**M-8260-ADD ‡** 1 x 1 mL  
**M-8260-ADD-PAK ‡** 5 x 1 mL  
0.2 mg/mL each in MeOH 8 comps.

**M-8260-ADD-10X ‡** 1 x 1 mL  
2.0 mg/mL each in MeOH 8 comps.

Acetone	2-Hexanone
2-Butanone	Iodomethane
Carbon disulfide	4-Methyl-2-pentanone
2-Chloroethyl vinyl ether	Vinyl acetate

**M-8260B-01** 1 x 1 mL  
**M-8260B-01-PAK** SAVE 5 x 1 mL  
2000 µg/mL each in MeOH 11 comps.

Benzyl chloride	2-Nitropropane
1-Chlorobutane	Dibromofluoromethane
1-Chlorohexane	Methyl acrylate
1,2,3,4-Diepoxybutane	MtBE
Diethyl ether	Pentafluorobenzene
Nitrobenzene	

**M-8260B-02** 1 x 1 mL  
**M-8260B-02-PAK** SAVE 5 x 1 mL  
2000 µg/mL each in MeOH 10 comps.

Allyl alcohol	Ethyl acetate
1-Butanol	Hexachloroethane
Chloroacetonitrile	2-Hydroxypropionitrile
3-Chloropropionitrile	Malonitrile
Epichlorohydrin	Pyridine

‡ To delay premature breakdown of thermally labile products in transit we suggest shipping with a "Cold Pack"

# Volatiles

## USEPA Method 8260B (Continued) Volatile Organic Compounds by GC/MS

**M-8260B-03**  
**M-8260B-03-PAK** **SAVE**  
 2000 µg/mL each in MeOH : Water 9:1

N-Nitrosodi- <i>n</i> -butylamine	Propylamine	1 x 1 mL
2-Picoline	<i>o</i> -Toluidine	5 x 1 mL
		4 comps.

**M-8260B-04**  
**M-8260B-04-PAK** **SAVE**  
 2000 µg/mL each in MeOH

<i>t</i> -Butanol	1-Propanol	1 x 1 mL
2-Chloroethanol	Isopropanol	5 x 1 mL
1,3-Dichloro-2-propanol	Propargyl alcohol	6 comps.

**M-8260B-05 ‡**  
**M-8260B-05-PAK ‡** **SAVE**  
 2000 µg/mL each in MeOH

Crotonaldehyde	Paraldehyde	1 x 1 mL
		5 x 1 mL
		2 comps.

**M-8260B-06-PAK ‡** **SAVE**  
 2000 µg/mL each in MeOH

Bromoacetone	<i>b</i> -Propiolactone	5 x 1 mL
2-Pentanone		3 comps.

### Chloroprene

**APP-9-048-R1-10X** 1 x 1 mL  
 1.0 mg/mL in MeOH

### Ethylene oxide

**M-8015B/5031-14-R1** 1 x 1 mL  
 5 mg/mL in H<sub>2</sub>O

### Chloral hydrate

**M-E-1179-M** 1 x 1 mL  
 1.0 mg/mL in MeOH

### Surrogates (GC/MS)

Each at 1.0 mg/mL in Water

Acetone- <i>d</i> <sub>6</sub>	<b>M-8260/5031-SS-01</b>	1 x 1 mL
Acetonitrile- <i>d</i> <sub>3</sub>	<b>M-8260/5031-SS-02</b>	1 x 1 mL
Acrylonitrile- <i>d</i> <sub>5</sub>	<b>M-8260/5031-SS-04</b>	1 x 1 mL
<i>p</i> -Dioxane- <i>d</i> <sub>8</sub>	<b>M-8260/5031-SS-10</b>	1 x 1 mL
Methyl ethyl ketone- <i>d</i> <sub>5</sub>	<b>M-8260/5031-SS-18</b>	1 x 1 mL
Pyridine- <i>d</i> <sub>5</sub>	<b>M-8260/5031-SS-26</b>	1 x 1 mL

### Internal Standard (GC/MS)

**M-8260/5031-IS-MS** 1 x 1 mL  
 1.0 mg/mL each in Water

Benzyl alcohol- <i>d</i> <sub>5</sub>	Dimethylformamide- <i>d</i> <sub>7</sub>	4 comps.
Diglyme- <i>d</i> <sub>4</sub>	Isopropyl alcohol- <i>d</i> <sub>5</sub>	

### Surrogate Standards

**M-8260-SS** 1 x 1 mL  
**M-8260-SS-PAK** **SAVE**  
 0.2 mg/mL each in MeOH

4-Bromofluorobenzene	Toluene- <i>d</i> <sub>8</sub>	5 x 1 mL
Dibromofluoromethane		3 comps.

**M-8260A/B-SS** 1 x 1 mL  
**M-8260A/B-SS-PAK** **SAVE**  
 0.2 mg/mL each in MeOH

**M-8260A/B-SS-10X** 1 x 1 mL  
**M-8260A/B-SS-10X-PAK** **SAVE**  
 2.0 mg/mL each in MeOH

<i>p</i> -Bromofluorobenzene	1,2-Dichloroethane- <i>d</i> <sub>2</sub>	4 comps.
Dibromofluoromethane	Toluene- <i>d</i> <sub>8</sub>	5 x 1 mL
		4 comps.

‡ To help prevent premature breakdown of thermally labile products when in transit, we suggest you request a "Cold Pack".

### Internal Standards

**M-8260-IS** 1 x 1 mL  
**M-8260-IS-PAK** **SAVE**  
 0.2 mg/mL each in MeOH

Chlorobenzene- <i>d</i> <sub>2</sub>	1,4-Dichlorobenzene- <i>d</i> <sub>2</sub>	5 x 1 mL
1,4-Difluorobenzene	Pentafluorobenzene	4 comps.

**M-8260-IS-R** 1 x 1 mL  
**M-8260-IS-R-PAK** **SAVE**  
 0.2 mg/mL each in MeOH

**M-8260-IS-R-10X-PAK** **SAVE**  
 2.0 mg/mL each in MeOH

2-Bromo-1-chloropropane	1,4-Dichlorobenzene- <i>d</i> <sub>2</sub>	5 x 1 mL
1,4-Difluorobenzene	Pentafluorobenzene	4 comps.

**M-8260A/B-IS** 1 x 1 mL  
**M-8260A/B-IS-PAK** **SAVE**  
 0.2 mg/mL each in MeOH

**M-8260A/B-IS-10X** 1 x 1 mL  
**M-8260A/B-IS-10X-PAK** **SAVE**  
 2.0 mg/mL each in MeOH

Chlorobenzene- <i>d</i> <sub>2</sub>	Fluorobenzene	5 x 1 mL
1,4-Dichlorobenzene- <i>d</i> <sub>2</sub>		3 comps.

### Combined Internal/Surrogate Standard

**M-8260A/B-IS/SS** 1 x 1 mL  
**M-8260A/B-IS/SS-PAK** **SAVE**  
 200 µg/mL each in MeOH

**M-8260A/B-IS/SS-10X** 1 x 1 mL  
**M-8260A/B-IS/SS-10XPAK** **SAVE**  
 2.0 mg/mL each in MeOH

<i>p</i> -Bromofluorobenzene	1,2-Dichloroethane- <i>d</i> <sub>2</sub>	7 comps.
Chlorobenzene- <i>d</i> <sub>2</sub>	Fluorobenzene	1 x 1 mL
Dibromofluoromethane	Toluene- <i>d</i> <sub>8</sub>	5 x 1 mL
1,4-Dichlorobenzene- <i>d</i> <sub>2</sub>		7 comps.

More EPA Methods can be found in our  
 EPA Supplement Catalog



# Volatiles

## USEPA Method 8240 & 8260 VOCs Auxiliary Standards

### Internal Standard VOA

M-8240/60-IS		1 x 1 mL
M-8240/60-IS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
M-8240/60-IS-10X		1 x 1 mL
M-8240/60-IS-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		
Bromochloromethane	1,4-Difluorobenzene	
Chlorobenzene-d <sub>6</sub>	Pentafluorobenzene	
1,4-Dichlorobenzene-d <sub>2</sub>		

### Surrogate Standard VOA

M-8240/60-SS		1 x 1 mL
M-8240/60-SS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
M-8240/60-SS-10X		1 x 1 mL
M-8240/60-SS-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		
p-Bromofluorobenzene	1,2-Dichloroethane-d <sub>2</sub>	
Dibromofluoromethane	Toluene-d <sub>8</sub>	

### Internal / Surrogate Standard VOA

M-8240/60-IS/SS		1 x 1 mL
M-8240/60-IS/SS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
M-8240/60-IS/SS-10X		1 x 1 mL
M-8240/60-IS/SS-10XPAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		
Bromochloromethane	1,2-Dichloroethane-d <sub>2</sub>	
p-Bromofluorobenzene	1,4-Difluorobenzene	
Chlorobenzene-d <sub>6</sub>	Pentafluorobenzene	
Dibromofluoromethane	Toluene-d <sub>8</sub>	
1,4-Dichlorobenzene-d <sub>2</sub>		

### Volatile Calibration Check Compounds (CCC)

CLP-020		1 x 1 mL
CLP-020-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
CLP-020-10X		1 x 1 mL
CLP-020-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		
Chloroform	Ethylbenzene	
1,1-Dichloroethene	Toluene	
1,2-Dichloropropane	Vinyl chloride	

### Volatile System Performance Check Cmpds. (SPCC)

CLP-021		1 x 1 mL
CLP-021-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
CLP-021-10X		1 x 1 mL
CLP-021-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		
Bromoform	1,1-Dichloroethane	
Chlorobenzene	1,1,2,2-Tetrachloroethane	
Chloromethane		

### Instrument Performance Check Solution

CLP-004		1 x 1 mL
CLP-004-PAK	SAVE	5 x 1 mL
25 µg/mL in MeOH		
CLP-004-10X		1 x 1 mL
CLP-004-10X-PAK	SAVE	5 x 1 mL
250 µg/mL in MeOH		
CLP-004-100X		1 x 1 mL
CLP-004-100X-PAK	SAVE	5 x 1 mL
2500 µg/mL in MeOH		
p-Bromofluorobenzene		

### Purgeable Organic Matrix Spiking Solution

CLP-003-R		1 x 1 mL
CLP-003-R-PAK	SAVE	5 x 1 mL
0.25 mg/mL each in MeOH		
CLP-003-R-10X		1 x 1 mL
CLP-003-R-10X-PAK	SAVE	5 x 1 mL
2.5 mg/mL each in MeOH		
Benzene	Toluene	
Chlorobenzene	Trichloroethene	
1,1-Dichloroethene		

## Auxiliary Standards - Volatiles

### Volatile Calibration Check Compounds (CCC)

CLP-020	0.2 mg/mL each in MeOH		1 x 1 mL
CLP-020-PAK	0.2 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-020-10X	2.0 mg/mL each in MeOH		1 x 1 mL
CLP-020-10X-PAK	2.0 mg/mL each in MeOH	SAVE	5 x 1 mL
6 comps.			
Chloroform	Ethylbenzene		
1,1-Dichloroethene	Toluene		
1,2-Dichloropropane	Vinyl chloride		

### Volatile System Performance Check Compounds (SPCC)

CLP-021	0.2 mg/mL each in MeOH		1 x 1 mL
CLP-021-PAK	0.2 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-021-10X	2.0 mg/mL each in MeOH		1 x 1 mL
CLP-021-10X-PAK	2.0 mg/mL each in MeOH	SAVE	5 x 1 mL
5 comps.			
Bromoform	1,1-Dichloroethane		
Chlorobenzene	1,1,2,2-Tetrachloroethane		
Chloromethane			

### Hexadecane Extraction Volatiles

CLP-BTEX	0.2 mg/mL each in MeOH		1 x 1 mL
CLP-BTEX-PAK	0.2 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-BTEX-10X	2.0 mg/mL each in MeOH		1 x 1 mL
CLP-BTEX-10X-PAK	2.0 mg/mL each in MeOH	SAVE	5 x 1 mL
9 comps.			
Benzene	m-Xylene		
Ethylbenzene	o-Xylene		
Toluene	p-Xylene		

CLP-001B		1 x 1 mL
1.0 mg/mL each in MeOH		2 comps.

n-Decane	n-Nonane
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### Instrument Performance Check Solution

CLP-004	25 µg/mL in MeOH		1 x 1 mL
CLP-004-PAK	25 µg/mL in MeOH	SAVE	5 x 1 mL
CLP-004-10X	250 µg/mL in MeOH		1 x 1 mL
CLP-004-10X-PAK	250 µg/mL in MeOH	SAVE	5 x 1 mL
CLP-004-100X	2500 µg/mL in MeOH		1 x 1 mL
CLP-004-100X-PAK	2500 µg/mL in MeOH	SAVE	5 x 1 mL
p-Bromofluorobenzene			

### Purgeable Surrogate Standard

CLP-PS	0.25 mg/mL each in MeOH		1 x 1 mL
CLP-PS-PAK	0.25 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-PS-4X	1.0 mg/mL each in MeOH		1 x 1 mL
CLP-PS-4X-PAK	1.0 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-PS-10X	2.5 mg/mL each in MeOH		1 x 1 mL
CLP-PS-10X-PAK	2.5 mg/mL each in MeOH	SAVE	5 x 1 mL
3 comps.			
p-Bromofluorobenzene	Toluene-d <sub>8</sub>		
1,2-Dichloroethane-d <sub>2</sub>			

### Purgeable Internal Standard

CLP-PI-0.25X	0.25 mg/mL each in MeOH		1 x 1 mL
CLP-PI-0.25X-PAK	0.25 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-PI	1.0 mg/mL each in MeOH		1 x 1 mL
CLP-PI-PAK	1.0 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-PI-2.5X	2.5 mg/mL each in MeOH		1 x 1 mL
CLP-PI-2.5X-PAK	2.5 mg/mL each in MeOH	SAVE	5 x 1 mL
3 comps.			
Bromochloromethane	1,4-Difluorobenzene		
Chlorobenzene-d <sub>6</sub>			

Auxiliary Standards Continued on the Next Page

# Volatiles

## Auxiliary Standards - Volatiles (Continued)

### Purgeable Internal/Surrogate Standard

<b>CLP-PIPS</b>		<b>1 x 1 mL</b>
<b>CLP-PIPS-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.5 mg/mL each in MeOH		
Bromochloromethane	1,2-Dichloroethane-d <sub>2</sub>	
p-Bromofluorobenzene	1,4-Difluorobenzene	
Chlorobenzene-d <sub>5</sub>	Toluene-d <sub>8</sub>	

### Purgeable Organic Matrix Spiking Solution

<b>CLP-003-R</b>	0.25 mg/mL each in MeOH	<b>1 x 1 mL</b>
<b>CLP-003-R-PAK</b>	0.25 mg/mL each in MeOH	<b>5 x 1 mL</b>
<b>CLP-003-R-10X</b>	2.5 mg/mL each in MeOH	<b>1 x 1 mL</b>
<b>CLP-003-R-10X-PAK</b>	2.5 mg/mL each in MeOH	<b>5 x 1 mL</b>
5 comps.		
Benzene	Toluene	
Chlorobenzene	Trichloroethene	
1,1-Dichloroethene		

## CLP OLM 04.1 & 04.2 - Volatiles

The highest quality standards for Contract Laboratory Program (CLP) statement of work. This set of volatile standards (listed below) along with a complete semi-volatile series (see pages 88-89) meets OLM 04.1, and also can be used for OLM 04.2 released in August of 1999.

### CLP OLM 04.1 & 04.2 - Volatiles Set

**CLP-VOC-KIT1** **9 x 1 mL**  
**Kit includes:** CLP-022-R3, M-601B, CLP-022K-10X, CLP-BTEX, CLP-PS-10X, CLP-PI-2.5X, CLP-PIPS, CLP-003R-10X, CLP-004-10X

### CLP OLM 04.1 & 04.2 - Volatile Target Compound List

<b>CLP-022-R3</b>		<b>1x 1 mL</b>
<b>CLP-022-R3-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
200 µg/mL in MeOH		
Benzene	1,2-Dichloropropane	
Bromodichloromethane	cis-1,3-Dichloropropene	
Bromoform	trans-1,3-Dichloropropene	
Carbon disulfide	Ethylbenzene	
Carbon tetrachloride	Isopropylbenzene	
Chlorobenzene	Methyl acetate	
Chloroform	Methylcyclohexane	
1,2-Dibromo-3-chloropropane	MtBE	
Cyclohexane	Styrene	
Dibromochloromethane	1,1,2,2-Tetrachloroethane	
1,2-Dibromoethane	Tetrachloroethene	
1,2-Dichlorobenzene	Toluene	
1,3-Dichlorobenzene	1,2,4-Trichlorobenzene	
1,4-Dichlorobenzene	1,1,1-Trichloroethane	
1,1-Dichloroethane	1,1,2-Trichloroethane	
1,2-Dichloroethane	Trichloroethene	
1,1-Dichloroethene	1,1,2-Trichloro-1,2,2-trifluoroethane	
cis-1,2-Dichloroethene	m-Xylene	
trans-1,2-dichloroethene	p-Xylene	
Dichloromethane	o-Xylene	

## Gases

<b>M-601B</b>		<b>1 x 1 mL</b>
<b>M-601B-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
Bromomethane	Dichlorodifluoromethane	
Chloromethane	Trichlorofluoromethane	
Chloroethane	Vinyl chloride	

## Ketones

<b>CLP-022K</b>		<b>1 x 1 mL</b>
0.2 mg/mL each in MeOH		
<b>CLP-022K-10X</b>		<b>1 x 1 mL</b>
2.0 mg/mL each in MeOH		
Acetone	2-Hexanone	
2-Butanone	4-Methyl-2-pentanone	

## CLP OLM 04.1 & 04.2 - Volatiles (Continued)

### CLP 04.1 & 04.2 Screening Mix

<b>CLP-BTEX</b>		<b>1 x 1 mL</b>
<b>CLP-BTEX-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
0.2 mg/mL each in MeOH		
<b>CLP-BTEX-10X</b>		<b>1 x 1 mL</b>
<b>CLP-BTEX-10X-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.0 mg/mL each in MeOH		
Benzene	m-Xylene	
Ethylbenzene	o-Xylene	
Toluene	p-Xylene	

### Purgeable Surrogate Standard

<b>CLP-PS-10X</b>		<b>1 x 1 mL</b>
<b>CLP-PS-10X-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.5 mg/mL each in MeOH		
p-Bromofluorobenzene	Toluene-d <sub>8</sub>	
1,2-Dichloroethane-d <sub>2</sub>		

### Purgeable Internal Standard

<b>CLP-PI-2.5X</b>		<b>1 x 1 mL</b>
<b>CLP-PI-2.5X-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.5 mg/mL each in MeOH		
Bromochloromethane	1,4-Difluorobenzene	
Chlorobenzene-d <sub>5</sub>		

### Purgeable Internal/Surrogate Standard

<b>CLP-PIPS</b>		<b>1 x 1 mL</b>
<b>CLP-PIPS-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.5 mg/mL each in MeOH		
Bromochloromethane	1,2-Dichloroethane-d <sub>2</sub>	
p-Bromofluorobenzene	1,4-Difluorobenzene	
Chlorobenzene-d <sub>5</sub>	Toluene-d <sub>8</sub>	

### Purgeable Organic Matrix Spiking Solution

<b>CLP-003-R-10X</b>		<b>1 x 1 mL</b>
<b>CLP-003-R-10X-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2.5 mg/mL each in MeOH		
Benzene	Toluene	
Chlorobenzene	Trichloroethene	
1,1-Dichloroethene		

### Instrument Performance Check Solution

<b>CLP-004-10X</b>		<b>1 x 1 mL</b>
<b>CLP-004-10X-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
250 µg/mL in MeOH		
<b>CLP-004-100X</b>		<b>1 x 1 mL</b>
<b>CLP-004-100X-PAK</b>	<b>SAVE</b>	<b>5 x 1 mL</b>
2500 µg/mL in MeOH		
p-Bromofluorobenzene		

# Volatiles

## VOC Selected Target Compound Solutions

### Volatile Target Compounds List (TCL)

CLP-022-SET ‡ set of 2 x 1 mL  
(includes CLP-022-PART-A and CLP-022-PART-B)

#### Part A

CLP-022-PART-A 1 x 1 mL  
0.5 mg/mL each in MeOH 29 comps.

Benzene	<i>trans</i> -1,2-Dichloroethylene
Bromodichloromethane	1,2-Dichloropropane
Bromoform	<i>cis</i> -1,3-Dichloropropene *
Bromomethane	<i>trans</i> -1,3-Dichloropropene **
Carbon tetrachloride	Ethylbenzene
Chlorobenzene	1,1,2,2-Tetrachloroethane
Chloroethane	Tetrachloroethene
Chloroform	Toluene
Chloromethane	1,1,1-Trichloroethane
Dibromochloromethane	1,1,2-Trichloroethane
1,1-Dichloroethane	Trichloroethene
Dichloromethane	Vinyl chloride
1,2-Dichloroethane	<i>m</i> -Xylene
1,1-Dichloroethylene	<i>p</i> -Xylene
<i>cis</i> -1,2-Dichloroethylene	

\* *cis* (1.06 x conc.)  
\*\* *trans* (0.94 x conc.)

#### Part B

CLP-022-PART-B ‡ 1 x 1 mL  
0.5 mg/mL each in MeOH 8 comps.

Acetone	4-Methyl-2-pentanone
2-Butanone	Styrene
Carbonylsulfide	Vinyl acetate
2-Hexanone	<i>o</i> -Xylene

### Volatile Target Compounds List (TCL)

#### Gases

CLP-022G	0.2 mg/mL each in MeOH		1 x 1 mL
CLP-022G-PAK	0.2 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-022G-10X	2.0 mg/mL each in MeOH		1 x 1 mL
CLP-022G-10X-PAK	2.0 mg/mL each in MeOH	SAVE	5 x 1 mL

4 comps.

Bromomethane	Chloromethane
Chloroethane	Vinyl chloride

#### Ketones

CLP-022K ‡	0.2 mg/mL each in MeOH		1 x 1 mL
CLP-022K-10X ‡	2.0 mg/mL each in MeOH		1 x 1 mL
CLP-022K-25X ‡	5.0 mg/mL each in MeOH	NEW	1 x 1 mL

4 comps.

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

‡ To help prevent premature breakdown of thermally labile products in transit, we suggest you request a "Cold Pack".

If you do not find the mixture you need, please inquire at your local Distributor for a very competitive prices.

### Volatile Target Compounds List (TCL)

CLP-022 ‡ 1 x 1 mL  
0.2 mg/mL each in MeOH 37 comps.

Acetone	<i>cis</i> -1,3-Dichloropropene *
Benzene	<i>trans</i> -1,3-Dichloropropene **
Bromodichloromethane	Ethylbenzene
Bromoform	2-Hexanone
Bromomethane	4-Methyl-2-pentanone
2-Butanone	Styrene
Carbonylsulfide	1,1,2,2-Tetrachloroethane
Carbon tetrachloride	Tetrachloroethene
Chlorobenzene	Toluene
Chloroethane	1,1,1-Trichloroethane
Chloroform	1,1,2-Trichloroethane
Chloromethane	Trichloroethene
Dibromochloromethane	Vinyl acetate
1,1-Dichloroethane	Vinyl chloride
Dichloromethane	<i>m</i> -Xylene
1,2-Dichloroethane	<i>o</i> -Xylene
1,1-Dichloroethylene	<i>p</i> -Xylene
<i>cis</i> -1,2-Dichloroethylene	
<i>trans</i> -1,2-Dichloroethylene	
1,2-Dichloropropane	

\* *cis* (1.06 x conc.)  
\*\* *trans* (0.94 x conc.)

CLP-022-R2 ‡ 1 x 1 mL  
0.2 mg/mL each in MeOH 36 comps.

Acetone	1,2-Dichloropropane
Benzene	<i>cis</i> -1,3-Dichloropropene *
Bromodichloromethane	<i>trans</i> -1,3-Dichloropropene **
Bromoform	Ethylbenzene
Bromomethane	2-Hexanone
2-Butanone	4-Methyl-2-pentanone
Carbonylsulfide	Styrene
Carbon tetrachloride	1,1,2,2-Tetrachloroethane
Chlorobenzene	Tetrachloroethene
Chloroethane	Toluene
Chloroform	1,1,1-Trichloroethane
Chloromethane	1,1,2-Trichloroethane
Dibromochloromethane	Trichloroethene
1,1-Dichloroethane	Vinyl chloride
Dichloromethane	<i>m</i> -Xylene
1,2-Dichloroethane	<i>o</i> -Xylene
1,1-Dichloroethylene	<i>p</i> -Xylene
<i>cis</i> -1,2-Dichloroethylene	
<i>trans</i> -1,2-Dichloroethylene	

\* *cis* (1.06 x conc.)  
\*\* *trans* (0.94 x conc.)

More EPA Methods can be found in our  
EPA Supplement Catalog



APP-9-030:97	10X:102, 103	M-502A-R-10X-	M-601B:102	M-8021-SS-M:99
APP-9-048-R1:97	CLP-022K-	PAK:93	M-601B-PAK:102	M-8021-SS-M-
APP-9-048-R1-	25X:103	M-502A-R-PAK:93	M-601C:95, 97	PAK:99
10X:100	CLP-BTEX:101,	M-502B:93, 95,	M-601C-10X:95	M-8021-SS-
APP-9-048-R1-	102	97, 99	M-601C-10X-	PAK:99
2X:99	CLP-BTEX-	M-502B-10X:93	PAK:95	M-8021A-SS:99
APP-9-130:97	10X:101, 102	M-502B-10X-	M-601C-PAK:95,	M-8021A-SS-
CLP-001B:101	CLP-BTEX-10X-	PAK:93	97	PAK:99
CLP-003-R:101,	PAK:101, 102	M-502B-PAK:93,	M-602:96	M-8021B-X1:97,
102	CLP-BTEX-	95, 97	M-602-GAS:96	99
CLP-003-R-	PAK:101, 102	M-502C-07:94	M-602-GAS-	M-8021B-X2:97,
10X:101, 102	CLP-PI:101	M-502C-08:94	PAK:96	99
CLP-003-R-10X-	CLP-PI-0.25X:101	M-502C-10:94	M-602-PAK:96	M-8240/60-IS:101
PAK:101, 102	CLP-PI-0.25X-	M-502C-11:94	M-602-SS:95, 96	M-8240/60-IS-
CLP-003-R-	PAK:101	M-502D:94	M-602-SS-	10X:101
PAK:101, 102	CLP-PI-2.5X:101,	M-502D/E/F:94	PAK:95, 96	M-8240/60-IS-
CLP-004:101	102	M-502E:94	M-603:99	10X-PAK:101
CLP-004-	CLP-PI-2.5X-	M-502F:94	M-624:96	M-8240/60-IS-
100X:101, 102	PAK:101, 102	M-503:95	M-624-SS-M:96	PAK:101
CLP-004-100X-	CLP-PI-PAK:101	M-503-PAK:95	M-624-SS-M-	M-8240/60-
PAK:101, 102	CLP-PIPS:102	M-504:95	PAK:96	IS/SS:101
CLP-004-	CLP-PIPS-	M-504-10X:98	M-8010-IS/SS:97	M-8240/60-IS/SS-
10X:101, 102	PAK:102	M-504-10X-	M-8010-IS/SS-	10X:101
CLP-004-10X-	CLP-PS:101	PAK:98	PAK:97	M-8240/60-IS/SS-
PAK:101, 102	CLP-PS-10X:101,	M-504-PAK:95	M-8010A-M:97	10X-PAK:101
CLP-004-PAK:101	102	M-524-FS:94	M-8010A-SET:97	M-8240/60-IS/SS-
CLP-020:101	CLP-PS-10X-	M-524-FS-PAK:94	M-8010R-1:97	PAK:101
CLP-020-10X:101	PAK:101, 102	M-524-IS:94	M-8015-ASL:98	M-8240/60-
CLP-020-10X-	CLP-PS-4X:101	M-524-IS-2:94	M-8015A:98	SS:101
PAK:101	CLP-PS-4X-	M-524-IS-2-	M-8015A-10X:98	M-8240/60-SS-
CLP-020-PAK:101	PAK:101	PAK:94	M-8015B-IS-	10X:101
CLP-021:101	CLP-PS-PAK:101	M-524-IS-PAK:94	10X:98	M-8240/60-SS-
CLP-021-10X:101	CLP-VOC-	M-524-SS:94	M-8015B/5031-	10X-PAK:101
CLP-021-10X-	KIT1:102	M-524-SS-PAK:94	14-R1:100	M-8240/60-SS-
PAK:101	M-001R:96, 97,	M-551.1A:95	M-8015B/5031-R-	PAK:101
CLP-021-PAK:101	99	M-551.1A-PAK:95	SET:98	M-8240C-R3-
CLP-022:103	M-001R-PAK:96,	M-551.1B:95	M-8020-10X:98	10X:99
CLP-022-PART-	97, 99	M-551.1B-PAK:95	M-8020-10X-	M-8260-ADD:99
A:103	M-501:93, 95, 97	M-551A:95	PAK:98	M-8260-ADD-
CLP-022-PART-	M-501-PAK:93,	M-551A-PAK:95	M-8020-IS:98	10X:99
B:103	95, 97	M-551B:95	M-8020-IS-10X:98	M-8260-IS:100
CLP-022-R2:103	M-502:93	M-551B-SET:95	M-8020-IS-10X-	M-8260-IS-
CLP-022-R3:102	M-502-10X:93	M-601:95, 96	PAK:98	PAK:100
CLP-022-R3-	M-502-10X-	M-601-10X:95, 96	M-8020-IS-	M-8260-IS-R:100
PAK:102	PAK:93	M-601-ASL:95	PAK:98	M-8260-IS-R-10X-
CLP-022-SET:103	M-502-IS:94	M-601-ASL-	M-8020-IS/SS-	PAK:100
CLP-022G:103	M-502-IS-2:94	PAK:95	ASL:98	M-8260-IS-R-
CLP-022G-	M-502-IS-2-	M-601-CHG:96	M-8020-IS/SS-	PAK:100
10X:103	PAK:94	M-601-CHG-	ASL-PAK:98	M-8260-SS:100
CLP-022G-10X-	M-502-IS-PAK:94	PAK:96	M-8020-SS:98	M-8260-SS-
PAK:103	M-502-PAK:93	M-601/602:96	M-8020-SS-	PAK:100
CLP-022G-	M-502-REG:94	M-601/602-	PAK:98	M-8260/5031-IS-
PAK:103	M-502-REG-	PAK:96	M-8020B-R1:98	FID:98
CLP-022K:102,	PAK:94	M-601A:95, 96	M-8020B-R1-	M-8260/5031-IS-
103	M-502A-R:93, 99	M-601A-PAK:95,	PAK:98	MS:100
CLP-022K-	M-502A-R-10X:93	96	M-8021-SS:99	M-8260/5031-SS-

01:100 S-078-10X-  
M-8260/5031-SS- PAK:98  
02:100  
M-8260/5031-SS-  
04:100  
M-8260/5031-SS-  
10:100  
M-8260/5031-SS-  
18:100  
M-8260/5031-SS-  
26:100  
M-8260A/B-  
IS:100  
M-8260A/B-IS-  
10X:100  
M-8260A/B-IS-  
10X-PAK:100  
M-8260A/B-IS-  
PAK:100  
M-8260A/B-  
IS/SS:100  
M-8260A/B-  
IS/SS-10X:100  
M-8260A/B-  
IS/SS-  
10XPAK:100  
M-8260A/B-  
IS/SS-PAK:100  
M-8260A/B-  
SS:100  
M-8260A/B-SS-  
10X:100  
M-8260A/B-SS-  
10X-PAK:100  
M-8260A/B-SS-  
PAK:100  
M-8260B-01:99  
M-8260B-01-  
PAK:99  
M-8260B-02:99  
M-8260B-02-  
PAK:99  
M-8260B-03:100  
M-8260B-03-  
PAK:100  
M-8260B-04:100  
M-8260B-04-  
PAK:100  
M-8260B-05:100  
M-8260B-05-  
PAK:100  
M-8260B-06:100  
M-8260B-06-  
PAK:100  
M-E-1179-M:100  
S-078-10X:98