Volatile Organic (VOC) Standards

AccuStandard®

Volatile Organic Compounds (VOCs) are generally classified as compounds that under normal ambient conditions can vaporize. This group includes aldehydes and ketones, as well as some light aromatic and straight chain hydrocarbons.

VOCs can enter the environment through many different routes. Many solvents, cleaners, paint thinners, dry cleaning solvents, and degreasers used both in industry and homes contain these compounds. Although not usually water soluble, if these compounds are released into the environment, they can still be found as contaminants in air and soil, as well as waste and drinking water.

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Drinking Water

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European	VOCs & Calibration Curves
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DIN 38407-9	Benzene
DIN 38407-9	Benzene
DIN EN ISO 10301	Halogenated VOCs
Korea	VOCs

Japan

Ministry of Health & Welfare	Organic, Tuning, Surrogate
Environmental Agency	Organic, Aldehydes, Internal, & Drinking Water Odor

US State Specific

Method 465D - Minnesota, Wisconsin DNR

Volatile Organic Compounds

Single Component VOCs

Compound	Conc.	Matrix	Cat. No.	Unit
Acetonitrile 75-05-8	100 µg/mL	MeOH	APP-9-005	1 mL
	10 mg/mL	Water	M-8015B-5031-02	1 mL
	1 mg/mL	Water	M-8033	1 mL
	1 mg/mL	MeOH	APP-9-005-10X	1 mL
	5 mg/mL	MeOH	APP-9-005-50X	1 mL
	5 mg/mL	IPA	AS-E0473	1 mL
Acrylamide 79-06-1	1 mg/mL	MeOH	M-8032	1 mL
Acrylonitrile 107-13-1	100 µg/mL	MeOH	APP-9-008	1 mL
	10 mg/mL	Water	M-8015B-5031-04	1 mL
	1 mg/mL	MeOH	APP-9-008-10X	1 mL
	10 mg/mL	MeOH	AS-E0003	1 mL
Allyl chloride 107-05-1	100 µg/mL	MeOH	APP-9-010	1 mL
	2 mg/mL	MeOH	APP-9-010-20X	1 mL
	1 mg/mL	MeOH	AS-E0476	1 mL
n-Amylbenzene 538-68-1		NEAT	V-001	100 mg
Azobenzene 103-33-3	2 mg/mL	CH_2Cl_2	Z-014B-1	1 mL
Benzene 71-43-2		NEAT	M-502-01N	1 gram
	100 µg/mL	MeOH	APP-9-015	1 mL
	1 mg/mL	MeOH	AS-E0004	1 mL
	0.2 mg/mL	MeOH	M-502-01	1 mL
	2 mg/mL	MeOH	M-502-01-10X	1 mL
Benzene-d_6 1076-43-3	0.2 mg/mL	MeOH	M-624-SS-01	1 mL
	2 mg/mL	MeOH	M-624-SS-01-10X	1 mL
Benzyl chloride 100-44-7	0.2 mg/mL	MeOH	M-8010-01	1 mL
	5 mg/mL	AcCN	AS-E0169	1 mL
2-Bromo-1-chloropropane 3017-95-6	20 mg/mL	MeOH	M-001R-3	1 mL
	0.2 mg/mL	MeOH	M-624-SS-04	1 mL
1-Bromo-2-nitrobenzene 577-19-5	1 mg/mL	Acetone	M-8081-IS-DC	1 mL
Bromobenzene 108-86-1		NEAT	M-502-02N	1 gram
	5 mg/mL	MeOH	AS-E0406	1 mL
	0.2 mg/mL	MeOH	M-502-02	1 mL
	2 mg/mL	MeOH	M-502-02-10X	1 mL
Bromochloroacetonitrile 83463-62-1	1 mg/mL	Acetone	AS-E1186	1 mL
	5 mg/mL	Acetone	M-551B-1	1 mL
2-Bromochlorobenzene 694-80-4	0.2 mg/mL	MeOH	M-624-SS-12	1 mL
4-Bromochlorobenzene 106-39-8	2 mg/mL	MeOH	M-8020-SS-1	1 mL
Bromochloromethane 74-97-5		NEAT	K-007N	100 mg
		NEAT	M-502-03N	1 gram
	0.2 mg/mL	MeOH	M-502-03	1 mL
	2 mg/mL	MeOH	M-502-03-10X	1 mL
	10 mg/mL	MeOH	AS-E0136	1 mL
Bromodichloromethane 75-27-4		NEAT	K-008N	100 mg
		NEAT	M-502-04N	1 gram
	100 µg/mL	MeOH	APP-9-030	1 mL
	0.2 mg/mL	MeOH	M-502-04	1 mL
	2 mg/mL	MeOH	M-502-04-10X	1 mL
	5 mg/mL	MeOH	AS-E0046	1 mL
***p*-Bromofluorobenzene** 460-00-4	25 µg/mL	MeOH	CLP-004	1 mL
	250 µg/mL	MeOH	CLP-004-10X	1 mL
	0.15 mg/mL	MeOH	AS-E0233	1 mL
	0.2 mg/mL	MeOH	M-624-SS-03	1 mL
	2 mg/mL	MeOH	M-624-SS-03-10X	1 mL
	2.5 mg/mL	MeOH	CLP-004-100X	1 mL
	25 mg/mL	MeOH	CLP-004-1000X	1 mL
	100 µg/mL	Acetone	M-551.1-IS	1 mL
	10 mg/mL	Acetone	M-551.1-IS-100X	1 mL
Bromoform 75-25-2		NEAT	M-502-05N	1 gram
	0.2 mg/mL	MeOH	M-502-05	1 mL
	2 mg/mL	MeOH	M-502-05-10X	1 mL
	5 mg/mL	MeOH	AS-E0212	1 mL
Bromomethane 74-83-9	100 µg/mL	MeOH	APP-9-032	1 mL
	0.2 mg/mL	MeOH	M-502-06	1 mL
	2 mg/mL	MeOH	M-502-06-10X	1 mL
Bromotrichloromethane 75-62-7		NEAT	K-009N	100 mg
1,3-Butadiene 106-99-0	0.2 mg/mL	MeOH	S-406A	1 mL
	2 mg/mL	MeOH	S-406A-10X	1 mL
***n*-Butylbenzene** 104-51-8		NEAT	V-002	100 mg
		NEAT	M-502-07N	1 gram
	0.2 mg/mL	MeOH	M-502-07	1 mL
	2 mg/mL	MeOH	M-502-07-10X	1 mL
	5 mg/mL	MeOH	AS-E1105	1 mL

Compound	Conc.	Matrix	Cat. No.	Unit
iso-Butylbenzene 538-93-2	100 mg	NEAT	V-003	100 mg
sec-Butylbenzene 135-98-8		NEAT	V-004	100 mg
		NEAT	M-502-08N	1 gram
	0.2 mg/mL	MeOH	M-502-08	1 mL
	2 mg/mL	MeOH	M-502-08-10X	1 mL
	5 mg/mL	MeOH	AS-E1104	1 mL
tert-Butylbenzene 98-06-6		NEAT	M-502-09N	1 gram
	0.2 mg/mL	MeOH	M-502-09	1 mL
	2 mg/mL	MeOH	M-502-09-10X	1 mL
	5 mg/mL	MeOH	AS-E1106	1 mL
Carbon disulfide 75-15-0	100 µg/mL	MeOH	APP-9-035	1 mL
	2 mg/mL	MeOH	APP-9-035-20X	1 mL
	5 mg/mL	MeOH	AS-E0363	1 mL
Carbon tetrabromide 558-13-4		NEAT	K-006N	100 mg
Carbon tetrachloride 56-23-5		NEAT	K-003N	100 mg
		NEAT	M-502-10N	1 gram
	100 µg/mL	MeOH	APP-9-036	1 mL
	0.2 mg/mL	MeOH	M-502-10	1 mL
	2 mg/mL	MeOH	M-502-10-10X	1 mL
	5 mg/mL	MeOH	AS-E0360	1 mL
Chloral hydrate 302-17-0	1000 µg/mL	MeOH	M-E-1179-M ❄	1 mL
	1000 µg/mL	Acetone	AS-E1179	1 mL
	5 mg/mL	Acetone	M-551B-2	1 mL
Chlorobenzene 108-90-7		NEAT	A-001	100 mg
		NEAT	M-502-11N	1 gram
	100 µg/mL	MeOH	APP-9-039	1 mL
	1 mg/mL	MeOH	AS-E0006	1 mL
	0.2 mg/mL	MeOH	M-502-11	1 mL
	2 mg/mL	MeOH	M-502-11-10X	1 mL
Chlorobenzene-d_5 3114-55-4	5 mg/mL	MeOH	CLP-PI-3-5X	1 mL
Chloroethane 75-00-3	100 µg/mL	MeOH	APP-9-042	1 mL
	0.2 mg/mL	MeOH	M-502-12	1 mL
	1000 µg/mL	MeOH	AS-E0015	1 mL
	2 mg/mL	MeOH	M-502-12-10X	1 mL
bis(2-Chloroethoxy)methane 111-91-1	100 µg/mL	CH_2Cl_2	APP-9-026	1 mL
	1000 µg/mL	MeOH	APP-9-026-M-10X	1 mL
	5 mg/mL	MeOH	AS-E0041	1 mL
1-Chloro-2-fluorobenzene 348-51-6	2 mg/mL	MeOH	S-163	1 mL
1-Chloro-4-fluorobenzene 352-33-0	0.2 mg/mL	MeOH	M-624-SS-13	1 mL
1-Chloro-3-nitrobenzene 121-73-3	1000 µg/mL	Acetone	M-8091-SS-100X	1 mL
Chloroform 67-66-3		NEAT	M-502-13N	1 gram
	0.2 mg/mL	MeOH	M-502-13	1 mL
	2 mg/mL	MeOH	M-502-13-10X	1 mL
1-Chlorohexane 544-10-5	0.2 mg/mL	MeOH	M-8010R-1-04	1 mL
	2 mg/mL	MeOH	M-8010R-1-04-10X	1 mL
Chloromethane 74-87-3	100 µg/mL	MeOH	APP-9-044	1 mL
	0.2 mg/mL	MeOH	M-502-14	1 mL
	2 mg/mL	MeOH	M-502-14-10X	1 mL
bis(2-Chloro-1-methylethyl)ether 108-60-1		NEAT	FETH-02N	100 mg
	100 µg/mL	CH_2Cl_2	APP-9-028	1 mL
Chloroprene 126-99-8	100 µg/mL	MeOH	APP-9-048-R1	1 mL
	200 µg/mL	MeOH	APP-9-048-R1-2X	1 mL
	1000 µg/mL	MeOH	APP-9-048-R1-10X	1 mL
	2.0 mg/mL	MeOH	APP-9-048-R1-20X	1 mL
3-Chloropropionitrile 542-76-7	1000 µg/mL	MeOH	AS-E0375	1 mL
2-Chlorotoluene 95-49-8		NEAT	M-502-15N	1 gram
	0.2 mg/mL	MeOH	M-502-15	1 mL
	2 mg/mL	MeOH	M-502-15-10X	1 mL
	5 mg/mL	MeOH	AS-E0150	1 mL
3-Chlorotoluene 108-41-8	5 mg/mL	MeOH	AS-E0151	1 mL
4-Chlorotoluene 106-43-4		NEAT	M-502-16N	1 gram
	0.2 mg/mL	MeOH	M-502-16	1 mL
	2 mg/mL	MeOH	M-502-16-10X	1 mL
Cyclohexane 110-82-7	1 gram	NEAT	TK-102-08N	1 gram
	2 mg/mL	MeOH	TK-102-08S-10X	1 mL

VOCs continued on next page

❄ ColdPAK required to maintain integrity of product.

Volatile Organic Compounds

Single Component VOCs

Compound	Conc.	Matrix	Cat. No.	Unit
Decylbenzene 104-72-3		NEAT	V-005	100 mg
Diallate 2303-16-4		NEAT	P-142N	10 mg
	100 µg/mL	MeOH	APP-9-057	1 mL
	1000 µg/mL	AcCN	AS-E0623	1 mL
Dibromochloromethane 124-48-1		NEAT	K-010N	100 mg
		NEAT	M-502-17N	1 gram
	100 µg/mL	MeOH	APP-9-060	1 mL
	0.2 mg/mL	MeOH	M-502-17	1 mL
	2 mg/mL	MeOH	M-502-17-10X	1 mL
1,2-Dibromo-3-chloropropane 96-12-8		NEAT	M-502-18N	1 gram
	0.2 mg/mL	MeOH	M-502-18	1 mL
	2 mg/mL	MeOH	M-502-18-10X	1 mL
	5 mg/mL	MeOH	AS-E0993	1 mL
Dibromoacetonitrile 3252-43-5	5 mg/mL	Acetone	M-551B-4	1 mL
1,2-Dibromoethane 106-93-4		NEAT	M-502-19N **	1 gram
	100 µg/mL	MeOH	APP-9-214	1 mL
	0.2 mg/mL	MeOH	M-502-19	1 mL
	2 mg/mL	MeOH	M-502-19-10X	1 mL
	5 mg/mL	MeOH	AS-E0171	1 mL
Dibromofluoromethane 1868-53-7	0.2 mg/mL	MeOH	M-8260-SS-2	1 mL
	2 mg/mL	MeOH	M-8260-SS-2-10X	1 mL
Dibromomethane 74-95-3		NEAT	K-004N	100 mg
		NEAT	M-502-20N	1 gram
	100 µg/mL	MeOH	APP-9-062	1 mL
	0.2 mg/mL	MeOH	M-502-20	1 mL
	2 mg/mL	MeOH	M-502-20-10X	1 mL
	5 mg/mL	MeOH	AS-E1097	1 mL
a,a-Dibromo-m-xylene 626-15-3	1 mg/mL	Acetone	M-8081-IS-X	1 mL
1,2-Dibromopropane 78-75-1	5 mg/mL	MeOH	M-552-IS	1 mL
	10 mg/mL	Hexane	M-556-IS	1 mL
1,2-Dibromo-1,1,2,2-tetrafluoroethane 124-73-2	1000 µg/mL	MeOH	AS-E0463	1 mL
2,3-Dichloro-1-propene 78-88-6	4.2 mg/mL	MeOH	AS-E0170	1 mL
trans-1,4-Dichloro-2-butene 110-57-6	100 µg/mL	MeOH	APP-9-068	1 mL
	2 mg/mL	MeOH	APP-9-068-20X	1 mL
Dichloroacetonitrile 3018-12-0	5 mg/mL	Acetone	M-551B-5	1 mL
1,2-Dichlorobenzene 95-50-1		NEAT	A-002	100 mg
		NEAT	M-502-21N	1 gram
	100 µg/mL	MeOH	APP-9-064	1 mL
	0.2 mg/mL	MeOH	M-502-21	1 mL
	2 mg/mL	MeOH	M-502-21-10X	1 mL
	5 mg/mL	MeOH	AS-E0023	1 mL
	2.0 mg/mL	Hexane	M-8120-02	1 mL
1,2-Dichlorobenzene-d_4 2199-69-1	0.15 mg/mL	MeOH	AS-E0776	1 mL
	0.2 mg/mL	MeOH	M-624-SS-11	1 mL
	2 mg/mL	MeOH	M-624-SS-11-10X	1 mL
1,3-Dichlorobenzene 541-73-1		NEAT	A-003	100 mg
		NEAT	M-502-22N	1 gram
	100 µg/mL	MeOH	APP-9-065	1 mL
	0.2 mg/mL	MeOH	M-502-22	1 mL
	1000 µg/mL	MeOH	AS-E0214	1 mL
	2 mg/mL	MeOH	M-502-22-10X	1 mL
	2 mg/mL	Hexane	M-8120-03	1 mL
1,4-Dichlorobenzene 106-46-7		NEAT	A-004	100 mg
		NEAT	M-502-23N	1 gram
	100 µg/mL	MeOH	APP-9-066	1 mL
	0.2 mg/mL	MeOH	M-502-23	1 mL
	2 mg/mL	MeOH	M-502-23-10X	1 mL
	0.25 mg/mL	Acetone	M-8151-IS-2	1 mL
	2 mg/mL	Hexane	M-8120-04	1 mL
	5 mg/mL	MeOH	AS-E0025	1 mL
1,4-Dichlorobenzene-d_4 3855-82-1	2 mg/mL	MeOH	Z-014J-3-M-0.5X	1 mL
	4 mg/mL	CH_2Cl_2	Z-014J-3	1 mL
1,4-Dichlorobutane 110-56-5	0.2 mg/mL	MeOH	M-624-SS-05	1 mL
	20 mg/mL	MeOH	M-001R-2	1 mL
1,4-Dichlorobutane-d_8 83547-96-0	0.15 mg/mL	MeOH	AS-E0196	1 mL
Dichlorodifluoromethane	100 µg/mL	MeOH	APP-9-069	1 mL
	0.2 mg/mL	MeOH	M-502-24	1 mL
	2 mg/mL	MeOH	M-502-24-10X	1 mL
	5000 µg/mL	MeOH	AS-E0346	1 mL

** This product can not ship by air

Compound	Conc.	Matrix	Cat. No.	Unit
1,1-Dichloroethane 75-34-3		NEAT	M-502-25N-100MG	100 mg
	100 µg/mL	MeOH	APP-9-070	1 mL
	0.2 mg/mL	MeOH	M-502-25	1 mL
	100 µg/mL	MeOH	AS-E0012	1 mL
	2 mg/mL	MeOH	M-502-25-10X	1 mL
1,2-Dichloroethane 107-06-2		NEAT	M-502-26N	1 gram
	100 µg/mL	MeOH	APP-9-071	1 mL
	0.2 mg/mL	MeOH	M-502-26	1 mL
	1000 µg/mL	MeOH	AS-E0009	1 mL
	2 mg/mL	MeOH	M-502-26-10X	1 mL
1,2-Dichloroethane-d_4 17060-07-0	0.2 mg/mL	MeOH	M-624-SS-06	1 mL
	2.0 mg/mL	MeOH	M-624-SS-06-10X	1 mL
1,1-Dichloroethene 75-35-4		NEAT	M-502-27N	1 gram
	100 µg/mL	MeOH	APP-9-072	1 mL
	0.2 mg/mL	MeOH	M-502-27	1 mL
	2 mg/mL	MeOH	M-502-27-10X	1 mL
cis-1,2-Dichloroethene 156-59-2		NEAT	M-502-28N	1 gram
	0.2 mg/mL	MeOH	M-502-28	1 mL
	2 mg/mL	MeOH	M-502-28-10X	1 mL
	10 mg/mL	MeOH	AS-E0173	1 mL
trans-1,2-Dichloroethene 156-60-5		NEAT	M-502-29N	1 gram
	100 µg/mL	MeOH	APP-9-073	1 mL
	0.2 mg/mL	MeOH	M-502-29	1 mL
	1 mg/mL	MeOH	AS-E0028	1 mL
	2 mg/mL	MeOH	M-502-29-10X	1 mL
Dichlorofluoromethane 75-43-4	0.2 mg/mL	MeOH	M-502-61	1 mL
	2 mg/mL	MeOH	M-502-61-10X	1 mL
Dichloromethane 75-09-2 *(Methylene chloride)*		NEAT	K-001N	100 mg
		NEAT	M-502-39N	1 gram
	100 µg/mL	MeOH	APP-9-074	1 mL
	0.2 mg/mL	MeOH	M-502-39	1 mL
	1000 µg/mL	MeOH	AS-E0042	1 mL
	2 mg/mL	MeOH	M-502-39-10X	1 mL
Dichloromethane-d_2 1665-00-5	2 mg/mL	MeOH	M-502-IS-2-3	1 mL
1,2-Dichloropropane 78-87-5		NEAT	M-502-30N	1 gram
	100 µg/mL	MeOH	APP-9-077	1 mL
	0.2 mg/mL	MeOH	M-502-30	1 mL
	1000 µg/mL	MeOH	AS-E0030	1 mL
	2 mg/mL	MeOH	M-502-30-10X	1 mL
1,3-Dichloropropane 142-28-9		NEAT	M-502-31N	1 gram
	0.2 mg/mL	MeOH	M-502-31	1 mL
	2 mg/mL	MeOH	M-502-31-10X	1 mL
	5 mg/mL	MeOH	AS-E1109	1 mL
2,2-Dichloropropane 594-20-7		NEAT	M-502-32N	1 gram
	0.2 mg/mL	MeOH	M-502-32	1 mL
	2 mg/mL	MeOH	M-502-32-10X	1 mL
	5 mg/mL	MeOH	AS-E1167	1 mL
1,3-Dichloropropene (cis/trans) 542-75-6		NEAT	M-502-34N	1 gram
	0.2 mg/mL	MeOH	M-502-34	1 mL
	400 µg/mL	MeOH	M-502-34-R	1 mL
	4 mg/mL	MeOH	M-502-34-R-10X	1 mL
cis & trans 1,3-Dichloropropene	5 mg/mL	MeOH	AS-E0218	1 mL
1,1-Dichloropropene 563-58-6	0.2 mg/mL	MeOH	M-502-33	1 mL
	2 mg/mL	MeOH	M-502-33-10X	1 mL
cis-1,3-Dichloropropene 10061-01-5	100 µg/mL	MeOH	APP-9-078	1 mL
trans-1,3-Dichloropropene 10061-02-6	100 µg/mL	MeOH	APP-9-079	1 mL
1,1-Dichloro-1-propylene 563-58-6	5000 µg/mL	MeOH	AS-E1166	1 mL
2,4-Dichlorotoluene 95-73-8	5000 µg/mL	MeOH	AS-E0149	1 mL
1,2,3,4-Diepoxybutane 1464-53-5	1 mg/mL	AcCN	AS-E0577	1 mL
m-Diethylbenzene 141-93-5		NEAT	V-007	100 mg
o-Diethylbenzene 135-01-3		NEAT	V-006	100 mg
p-Diethylbenzene 105-05-5		NEAT	V-008	100 mg
	100 µg/mL	Isooctane	M-GRA-ST	1 mL
1,4-Difluorobenzene 540-36-3	0.2 mg/mL	MeOH	M-624-SS-07	1 mL
	2 mg/mL	MeOH	M-624-SS-07-10X	1 mL
Dimethyl sulfate 77-78-1	1 mg/mL	AcCN	AS-E0389	1 mL
1,3-Dimethyl-2-nitrobenzene 81-20-9	0.25 mg/mL	MtBE	M-507-SS	1 mL
	1.0 mg/mL	MtBE	M-507-SS-4X	1 mL
1,3-Dinitrobenzene 99-65-0	100 µg/mL	CH_2Cl_2	APP-9-089	1 mL
	1 mg/mL	CH_2Cl_2	APP-9-089-10X	1 mL

Volatile Organic Compounds

Single Component VOCs

Compound	Conc.	Matrix	Cat. No.	Unit
	5 mg/mL	MeOH	AS-E0527	1 mL
2,5-Dinitrotoluene 619-15-8	100 µg/mL	AcCN	M-8095-SS-03	1 mL
3,4-Dinitrotoluene 610-39-9	100 µg/mL	AcCN	M-8095-SS-01	1 mL
Dodecylbenzene 123-01-3		NEAT	V-009	100 mg
Epichlorohydrin 106-89-8	2000 µg/mL	AcCN	M-8240E-R-13-10X	1 mL
	5 mg/mL	AcCN	AS-E0258	1 mL
1,2-Epoxybutane 106-88-7	5 mg/mL	AcCN	AS-E0286	1 mL
1,2-Epoxypropane (Propylene oxide) 75-56-9	1000 µg/mL	AcCN	AS-E0308	1 mL
Ethyl acetate 141-78-6	10 mg/mL	Water	M-8015B-5031-12	1 mL
Ethyl methacrylate 97-63-2	100 µg/mL	MeOH	APP-9-105	1 mL
	1000 µg/mL	MeOH	AS-E0687	1 mL
Ethyl methanesulfonate 62-50-0	100 µg/mL	CH_2Cl_2	APP-9-106	1 mL
	1000 µg/mL	AcCN	AS-E0456	1 mL
Ethylbenzene 100-41-4		NEAT	M-502-35N	1 gram
	100 µg/mL	MeOH	APP-9-104	1 mL
	0.2 mg/mL	MeOH	M-502-35	1 mL
	2 mg/mL	MeOH	M-502-35-10X	1 mL
	10 mg/mL	MeOH	AS-E0036	1 mL
Ethylbenzene-d_{10} 25837-05-2	0.2 mg/mL	MeOH	M-624-SS-08	1 mL
Ethylene glycol 107-21-1	2 mg/mL	Water	D-4291-93	1 mL
	10 mg/mL	Water	M-8015B-5031-13	1 mL
Ethylene oxide 75-21-8	0.2 mg/mL	Isooctane	S-354-2	1 mL
	5 mg/mL	Isooctane	M-8015B-5031-14-TP-R1❄	1 mL
	5 mg/mL	Water	M-8015B-5031-14-R1❄	1 mL
m-Ethyltoluene 620-14-4		NEAT	V-031	100 mg
o-Ethyltoluene 611-14-3		NEAT	V-010	100 mg
p-Ethyltoluene 622-96-8		NEAT	V-011	100 mg
2-Fluoroacetamide 640-19-7	5 mg/mL	AcCN: MeOH (80:20)	AS-E0299	1 mL
Fluorobenzene 462-06-6	0.15 mg/mL	MeOH	AS-E0232	1 mL
	0.2 mg/mL	MeOH	M-624-SS-09	1 mL
	2 mg/mL	MeOH	M-524-IS-2	1 mL
	20 mg/mL	MeOH	M-524-IS-2-10X	1 mL
Fluorotrichloromethane 75-69-4	5 mg/mL	MeOH	AS-E0047	1 mL
Heptadecylbenzene 14752-75-1		NEAT	V-014	100 mg
Heptylbenzene 1078-71-3		NEAT	V-012	100 mg
Hexachlorobenzene 118-74-1		NEAT	A-012	100 mg
	100 µg/mL	MeOH	APP-9-112	1 mL
	1000 µg/mL	Acetone	APP-9-112-A-10X	1 mL
	2 mg/mL	CH_2Cl_2	APP-9-112-D-20X	1 mL
	2 mg/mL	Hexane	M-8120-05	1 mL
Hexachlorobutadiene 87-68-3		NEAT	M-502-36N	1 gram
	100 µg/mL	MeOH	APP-9-113	1 mL
	0.2 mg/mL	MeOH	M-502-36	1 mL
	2 mg/mL	MeOH	M-502-36-10X	1 mL
	5 mg/mL	MeOH	AS-E0050	1 mL
	2 mg/mL	Hexane	M-8120-06	1 mL
Hexachlorocyclopentadiene 77-47-4	100 µg/mL	MeOH	APP-9-114	1 mL
	1000 µg/mL	MeOH	APP-9-114-10X	1 mL
	2 mg/mL	Hexane	M-8120-07	1 mL
Hexachloroethane 67-72-1	100 µg/mL	MeOH	APP-9-115	1 mL
	1000 µg/mL	MeOH	AS-E0011	1 mL
	2 mg/mL	Hexane	M-8120-08	1 mL
Hexachlorophene 70-30-4	100 µg/mL	MeOH	APP-9-116	1 mL
	2 mg/mL	CH_2Cl_2	APP-9-116-D-20X	1 mL
	5 mg/mL	MeOH	AS-E0323	1 mL
Hexachloropropene 1888-71-7	100 µg/mL	MeOH	APP-9-117	1 mL
	1 mg/mL	MeOH	AS-E0364	1 mL
Hexadecylbenzene 1459-09-2		NEAT	V-015	100 mg
Hexylbenzene 1077-16-3		NEAT	V-013	100 mg
Isopropylbenzene 98-82-8		NEAT	M-502-37N	1 gram
	0.2 mg/mL	MeOH	M-502-37	1 mL
	2 mg/mL	MeOH	M-502-37-10X	1 mL

Compound	Conc.	Matrix	Cat. No.	Unit
p-Isopropyltoluene (p-Cymene)		NEAT	M-502-38N	1 gram
	0.2 mg/mL	MeOH	M-502-38	1 mL
	2 mg/mL	MeOH	M-502-38-10X	1 mL
	5 mg/mL	MeOH	AS-E1108	1 mL
Methacrylonitrile 126-98-7	100 µg/mL	MeOH	APP-9-125	1 mL
	1000 µg/mL	MeOH	AS-E0686	1 mL
Methyl bromide 74-83-9	1000 µg/mL	AcCN	AS-E0044	1 mL
Methyl 2-bromopropionate 5445-17-0	1000 µg/mL	MtBE	M-552.1-SS-ME	1 mL
Methyl chloride 74-87-3	5 mg/mL	MeOH	AS-E0043	1 mL
Methyl-2,3-dibromopropionate 1729-67-5	1000 µg/mL	MtBE	M-552.2-SS-ME	1 mL
1-Methyl ethyl benzene 98-82-8	5 mg/mL	MeOH	AS-E0669	1 mL
Methyl iodide 74-88-4	100 µg/mL	MeOH	APP-9-130	1 mL
	2 mg/mL	MeOH	APP-9-130-20X	1 mL
Methyl isothiocyanate 556-61-6	25 µg/mL	Acetone	M-1659-RPS	1 mL
Methyl methacrylate 80-62-6	100 µg/mL	MeOH	APP-9-131	1 mL
	1000 µg/mL	MeOH	AS-E0439	1 mL
	2 mg/mL	MeOH	APP-9-131-20X	1 mL
Methyl methanesulfonate 66-27-3	100 µg/mL	CH_2Cl_2	APP-9-132	1 mL
	1000 µg/mL	AcCN	AS-E0431	1 mL
Naphthalene 91-20-3		NEAT	M-502-40N	1 mL
	1000 µg/mL	MeOH	AS-E0053	1 mL
	2 mg/mL	MeOH	M-502-40-10X	1 mL
Naphthalene-d_8 1146-65-2	0.2 mg/mL	CH_2Cl_2	M-625-12	1 mL
	4 mg/mL	CH_2Cl_2	Z-014J-4	1 mL
Nitrobenzene 98-95-3		NEAT	R-047N	100 mg
	100 µg/mL	MeOH	APP-9-143	1 mL
	1000 µg/mL	MeOH	APP-9-143-10X	1 mL
	5 mg/mL	MeOH	AS-E0054	1 mL
Nitrobenzene-d_5 4165-60-0	0.2 mg/mL	CH_2Cl_2	M-625-13	1 mL
	2 mg/mL	CH_2Cl_2	M-625-13-10X	1 mL
Nonadecylbenzene 29136-19-4		NEAT	V-018	100 mg
Nonylbenzene 1081-77-2		NEAT	V-017	100 mg
Octadecylbenzene 4445-07-2		NEAT	V-020	100 mg
Octylbenzene 2189-60-8		NEAT	V-019	100 mg
Pentachlorobenzene 608-93-5		NEAT	A-011	100 mg
	100 µg/mL	MeOH	APP-9-173	1 mL
	2.5 mg/mL	MeOH	AS-E0260	1 mL
Pentachloroethane 76-01-7	100 µg/mL	MeOH	APP-9-174	1 mL
	2 mg/mL	MeOH	APP-9-174-20X	1 mL
	5 mg/mL	MeOH	AS-E0300	1 mL
Pentadecylbenzene 2131-18-2		NEAT	V-021	100 mg
Pentafluorobenzene 363-72-4	0.2 mg/mL	MeOH	M-624-SS-10	1 mL
1,2-Propanediol 57-55-6	1000 µg/mL	AcCN	AS-E0524	1 mL
Propionic acid 79-09-4		NEAT	AP-010N	1 gram
	5 mg/mL	AcCN	AS-E0673	1 mL
Propionitrile 107-12-0	100 µg/mL	MeOH	APP-9-184	1 mL
	5 mg/mL	MeOH	AS-E0338	1 mL
	10 mg/mL	Water	M-8015B-5031-25	1 mL
n-Propylbenzene (1-Phenylpropane) 103-65-1		NEAT	V-022	100 mg
		NEAT	M-502-41N	1 gram
	0.2 mg/mL	MeOH	M-502-41	1 mL
	2 mg/mL	MeOH	M-502-41-10X	1 mL
	5 mg/mL	MeOH	AS-E1112	1 mL
Styrene 100-42-5		NEAT	M-502-42N	1 gram
	100 µg/mL	MeOH	APP-9-189	1 mL
	0.2 mg/mL	MeOH	M-502-42	1 mL
	2 mg/mL	MeOH	M-502-42-10X	1 mL
	5 mg/mL	MeOH	AS-E0257	1 mL
TCMX (Tetrachloro-m-xylene) 877-09-8	100 µg/mL	Hexane	M-8082-SS	1 mL
	0.2 mg/mL	MeOH	S-279	1 mL
	1 mg/mL	MeOH	S-279-5X	1 mL
	1 mg/mL	Hexane	M-8082-SS-10X	1 mL

VOCs continued on next page

Volatile Organic Compounds

Single Component VOCs

Compound	Conc.	Matrix	Cat. No.	Unit
1,2,3,4-Tetrachlorobenzene		NEAT	A-008	100 mg
634-66-2	1000 µg/mL	MeOH	AS-E0225	1 mL
1,2,3,5-Tetrachlorobenzene		NEAT	A-009	100 mg
634-90-2	100 µg/mL	Isooctane	P-1001S-TP	1 mL
1,2,4,5-Tetrachlorobenzene		NEAT	A-010	100 mg
95-94-3	100 µg/mL	MeOH	APP-9-191	1 mL
	1000 µg/mL	MeOH	APP-9-191-10X	1 mL
	2 mg/mL	Hexane	M-8120-09	1 mL
	2.5 mg/mL	AcCN	AS-E0177	1 mL
1,1,1,2-Tetrachloroethane		NEAT	M-502-43N	1 gram
630-20-6	100 µg/mL	MeOH	APP-9-192	1 mL
	0.2 mg/mL	MeOH	M-502-43	1 mL
	1000 µg/mL	MeOH	AS-E0335	1 mL
	2 mg/mL	MeOH	M-502-43-10X	1 mL
1,1,2,2-Tetrachloroethane		NEAT	M-502-44N	1 gram
79-34-5	100 µg/mL	MeOH	APP-9-193	1 mL
	0.2 mg/mL	MeOH	M-502-44	1 mL
	2 mg/mL	MeOH	M-502-44-10X	1 mL
	5 mg/mL	MeOH	AS-E0014	1 mL
Tetrachloroethene		NEAT	M-502-45N	1 gram
127-18-4	100 µg/mL	MeOH	APP-9-194	1 mL
	0.2 mg/mL	MeOH	M-502-45	1 mL
	2 mg/mL	MeOH	M-502-45-10X	1 mL
	5 mg/mL	MeOH	AS-E0083	1 mL
Tetradecylbenzene		NEAT	V-023	100 mg
1459-10-5				
Tetrahydrofuran	0.2 mg/mL	MeOH	S-457S	1 mL
109-99-9	2 mg/mL	MeOH	S-457S-10X	1 mL
	1 mg/mL	Water	M-1671A-IS	1 mL
1,2,3,4-Tetramethylbenzene		NEAT	V-024	100 mg
488-23-3				
1,2,3,5-Tetramethylbenzene		NEAT	V-025	100 mg
527-53-7				
1,2,4,5-Tetramethylbenzene		NEAT	V-026	100 mg
95-93-2				
Toluene		NEAT	M-502-46N	1 gram
108-88-3	100 µg/mL	MeOH	APP-9-198	1 mL
	0.2 mg/mL	MeOH	M-502-46	1 mL
	1000 µg/mL	MeOH	AS-E0084	1 mL
	2 mg/mL	MeOH	M-502-46-10X	1 mL
Toluene-d_8	0.25 mg/mL	MeOH	CLP-PS-3	1 mL
2037-26-5	2.5 mg/mL	MeOH	CLP-PS-3-10X	1 mL
1,3,5-Tribromobenzene	50 µg/mL	Acetone	M-8121-IS	1 mL
626-39-1				
Trichloroacetonitrile	5 mg/mL	Acetone	M-551B-7	1 mL
545-06-2				
1,2,3-Trichlorobenzene		NEAT	A-005	100 mg
87-61-6		NEAT	M-502-47N	1 gram
	0.2 mg/mL	MeOH	M-502-47	1 mL
	2 mg/mL	MeOH	M-502-47-10X	1 mL
	5 mg/mL	MeOH	AS-E0175	1 mL
1,2,4-Trichlorobenzene		NEAT	A-006	100 mg
120-82-1		NEAT	M-502-48N	1 gram
	100 µg/mL	MeOH	APP-9-201	1 mL
	0.2 mg/mL	MeOH	M-502-48	1 mL
	1000 µg/mL	MeOH	AS-E0007	1 mL
	2 mg/mL	MeOH	M-502-48-10X	1 mL
1,3,5-Trichlorobenzene		NEAT	A-007	100 mg
108-70-3	5 mg/mL	MeOH	AS-E0176	1 mL
1,1,1-Trichloroethane	100 µg/mL	MeOH	APP-9-202	1 mL
71-55-6	0.2 mg/mL	MeOH	M-502-49	1 mL
	1 mg/mL	MeOH	AS-E0010	1 mL
	2 mg/mL	MeOH	M-502-49-10X	1 mL

Compound	Conc.	Matrix	Cat. No.	Unit
1,1,2-Trichloroethane		NEAT	M-502-50N	1 gram
79-00-5	100 µg/mL	MeOH	APP-9-203	1 mL
	0.2 mg/mL	MeOH	M-502-50	1 mL
	1 mg/mL	MeOH	AS-E0013	1 mL
	2 mg/mL	MeOH	M-502-50-10X	1 mL
Trichloroethene		NEAT	M-502-51N	1 gram
79-01-6	100 µg/mL	MeOH	APP-9-204	1 mL
	0.2 mg/mL	MeOH	M-502-51	1 mL
	1000 µg/mL	MeOH	AS-E0085	1 mL
	2 mg/mL	MeOH	M-502-51-10X	1 mL
Trichlorofluoromethane	100 µg/mL	MeOH	APP-9-205	1 mL
75-69-4	0.2 mg/mL	MeOH	M-502-52	1 mL
	2 mg/mL	MeOH	M-502-52-10X	1 mL
1,1,2-Trichloropropane	200 µg/mL	MeOH	S-1321B	1 mL
598-77-6				
1,2,3-Trichloropropane		NEAT	M-502-53N	1 gram
96-18-4	100 µg/mL	MeOH	APP-9-208	1 mL
	0.2 mg/mL	MeOH	M-502-53	1 mL
	1 mg/mL	MeOH	APP-9-208-10X	1 mL
	1 mg/mL	MtBE	M-552.1-IS	1 mL
	2 mg/mL	MeOH	M-502-53-10X	1 mL
	5 mg/mL	MeOH	AS-E0368	1 mL
a,a,a-Trichlorotoluene	0.2 mg/mL	MeOH	M-624-SS-14	1 mL
98-07-7				
Tridecylbenzene		NEAT	V-027	100 mg
123-02-4				
1,2,3-Trimethylbenzene		NEAT	V-028	100 mg
526-73-8	1000 µg/mL	CH_2Cl_2	V-028S-D-10X	1 mL
	3 % w/w	Isooctane	M-GRA-FP	1 mL
1,2,4-Trimethylbenzene		NEAT	V-029	100 mg
95-63-6		NEAT	M-502-54N	1 gram
	0.2 mg/mL	MeOH	M-502-54	1 mL
	2 mg/mL	MeOH	M-502-54-10X	1 mL
	5 mg/mL	MeOH	AS-E1107	1 mL
1,3,5-Trimethylbenzene		NEAT	V-016	100 mg
108-67-8		NEAT	M-502-55N	1 gram
	0.2 mg/mL	MeOH	M-502-55	1 mL
	2 mg/mL	MeOH	M-502-55-10X	1 mL
	5 mg/mL	MeOH	AS-E1103	1 mL
1,3,5-Trinitrobenzene	100 µg/mL	MeOH	APP-9-210	1 mL
99-35-4	2 mg/mL	MeOH	M-8270-10	1 mL
	2 mg/mL	CH_2Cl_2	APP-9-210-D-20X	1 mL
Undecylbenzene		NEAT	V-030	100 mg
6742-54-7				
Vinyl acetate	100 µg/mL	MeOH	APP-9-211 ❄	1 mL
108-05-4	2 mg/mL	MeOH	APP-9-211-20X ❄	1 mL
	1000 mg/mL	AcCN	AS-E0327	1 mL
Vinyl chloride	100 µg/mL	MeOH	APP-9-212	1 mL
75-01-4	0.2 mg/mL	MeOH	M-502-56	1 mL
	1000 µg/mL	MeOH	AS-E0536	1 mL
	2 mg/mL	MeOH	M-502-56-10X	1 mL
Xylene (total)	100 µg/mL	MeOH	APP-9-213	1 mL
m-Xylene		NEAT	M-502-58N	1 gram
108-38-3	0.2 mg/mL	MeOH	M-502-58	1 mL
	1 mg/mL	MeOH	AS-E0202	1 mL
	2 mg/mL	MeOH	M-502-58-10X	1 mL
o-Xylene		NEAT	M-502-57N	1 gram
95-47-6	0.2 mg/mL	MeOH	M-502-57	1 mL
	1000 µg/mL	MeOH	AS-E0201	1 mL
	2 mg/mL	MeOH	M-502-57-10X	1 mL
p-Xylene		NEAT	M-502-59N	1 gram
106-42-3	0.2 mg/mL	MeOH	M-502-59	1 mL
	1000 µg/mL	MeOH	AS-E0203	1 mL
	2 mg/mL	MeOH	M-502-59-10X	1 mL

Volatile Organic Compounds

Method 502.2 Volatile Organic Compounds by PID/ELCD

54 Liquid Components

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

Certificate will reflect actual cis/trans ratio

6 Gas Components

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

Liquid Components

M-502A-R — **1 x 1 mL**
M-502A-R-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH — 54 comps.

M-502A-R-10X — **1 x 1 mL**
M-502A-R-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 54 comps.

Gas Components

M-502B — **1 x 1 mL**
M-502B-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH — 6 comps.

M-502B-10X — **1 x 1 mL**
M-502B-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 6 comps.

54 Liquid and 6 Gas Component Sets

M-502A-R-B-SET — **2 x 1 mL**
0.2 mg/mL each in MeOH — M-502A-R, M-502B

M-502A-R-B-10X-SET — **2 x 1 mL**
2.0 mg/mL each in MeOH — M-502A-R-10X, M-502B-10X

Individual Component Neats

To order, specify identity
M-502-##N **1 x 1 gram**

Except Gases

M-502-06N **M-502-24N**
M-502-12N **M-502-52N**
M-502-14N **M-502-56N**

Technical Note

Solutions containing volatile components (such as gases) should be chilled before opening to ensure gases are in the solution. In order to maintain high quality standards, any transferred volume should have minimal headspace and PTFE septa caps should be replaced often if pierced.

These solutions represent a breakdown of Method 502 comps. into groups containing liquid and gaseous components.

All 60 liquid and gas components in One Solution

Liquids and Gases components

M-502 — **1 x 1 mL**
M-502-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH — 60 comps.

M-502-10X — **1 x 1 mL**
M-502-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 60 comps.

Liquids and Gases components plus MtBE

M-502-R1 — **1 x 1 mL**
M-502-R1-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH — 61 comps.

Liquids components plus MtBE

M-502A-R3 — **1 x 1 mL**
0.2 mg/mL each in MeOH — 55 comps.

M-502A-R3-10X — **1 x 1 mL**
2.0 mg/mL each in MeOH — 55 comps.

59 Component Set

M-502-SET — **59 x 1 mL**
Each at 0.2 mg/mL in MeOH

M-502-10X-SET — **59 x 1 mL**
Each at 2.0 mg/mL in MeOH

Individual Component Solutions

To order, specify identity (#) and conc. (0.2 or 2.0 mg/mL)

M-502-# — **Each at 0.2 mg/mL in MeOH** — **1 x 1 mL**
M-502-#-10X — **Each at 2.0 mg/mL in MeOH** — **1 x 1 mL**

M-502-34A & M-502-34B only available as mix: M-502-34R

M-502-34-R — **1 x 1 mL**
0.4 mg/mL each in MeOH

M-502-34-R-10X — **1 x 1 mL**
4.0 mg/mL each in MeOH

1,3-Dichloropropene (cis/trans)

Certificate will reflect actual cis/trans ratio

Volatile Organic Compounds (VOCs)

Method 502.2 VOCs by PID/ELCD (continued)

Internal/Surrogate Standard

M-502-IS-SS — **1 x 1 mL**
M-502-IS-SS-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 4 comps.

- 1-Chloro-3-fluorobenzene
- 2-Chloropropane
- Fluorobenzene
- α,α,α-Trifluorotoluene

Technical Note

M-502-IS/SS is useful for DB-624/VRX analysis by GC/ELCD/PID. 2-Chloropropane has been included in the standard to be used as an early eluting Internal Standard. The use of this Internal Standard aids in quantitating the gaseous components in purgeable volatiles.

Internal/Surrogate Standard

Alternate Source

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

- 2-Bromo-1-chloropropane
- 1-Chloro-2-fluorobenzene

o,m,p-Xylenes Mix

M-502-60 — **1 x 1 mL**
0.2 mg/mL in MeOH — 3 comps.

M-502-60-10X — **1 x 1 mL**
2.0 mg/mL in MeOH — 3 comps.

- *o*-Xylene
- *m*-Xylene
- *p*-Xylene

Match frequently requested products.

Alternate Source **ASL products can be used as an independent second source.**

Hazardous Substance List (HSL) Volatiles Mix

M-HSL ❄ — **1 x 1 mL**
2.0 mg/mL each in MeOH — 8 comps.

- Acetone
- 2-Butanone
- Carbon disulfide
- 2-Hexanone
- 4-Methyl-2-pentanone
- Styrene
- Vinyl acetate
- *o*-Xylene

❄ ColdPAK required to maintain integrity of product.

Method 502 Unregulated VOC Mix

M-502C-09 — **1 x 1 mL**
2.0 mg/mL each in MeOH — 39 comps.

- Bromobenzene
- Bromochloromethane
- Bromodichloromethane
- Bromoform
- Bromomethane
- *n*-Butylbenzene
- *sec*-Butylbenzene
- *tert*-Butylbenzene
- Chloroethane
- Chloroform
- Chloromethane
- 2-Chlorotoluene
- 4-Chlorotoluene
- Dibromochloromethane
- Dibromomethane
- 1,3-Dichlorobenzene
- Dichlorodifluoromethane
- 1,1-Dichloroethane
- 1,2-Dichloropropane
- 1,3-Dichloropropane
- 2,2-Dichloropropane
- 1,1-Dichloropropene
- *cis*-1,3-Dichloropropene
- *trans*-1,3-Dichloropropene
- Hexachlorobutadiene
- Isopropylbenzene *(Cumene)*
- *p*-Isopropyltoluene *(p-Cymene)*
- Dichloromethane *(Methylene chloride)*
- Naphthalene
- *n*-Propylbenzene
- 1,1,1,2-Tetrachloroethane
- 1,1,2,2-Tetrachloroethane
- 1,2,3-Trichlorobenzene
- 1,2,4-Trichlorobenzene
- 1,1,2-Trichloroethane
- Trichlorofluoromethane
- 1,2,3-Trichloropropane
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene *(Mesitylene)*

Certificate will reflect actual cis/trans ratio

The following solutions represent an alternate source formulation of Method 502/524 components based on similar volatility groups.

Method 502 VOC ASL Set

M-502-K1-SET — **6 x 1 mL**
M-502B-10X, M-502C-02, M-502C-03
M-502C-04, M-502C-05, M-502C-06

M-502B-10X Alternate Source — **1 x 1 mL**
M-502B-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 6 comps.

- Bromomethane
- Chloroethane
- Chloromethane
- Dichlorodifluoromethane
- Trichlorofluoromethane
- Vinyl chloride

M-502C-02 Alternate Source — **1 x 1 mL**
M-502C-02-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 6 comps.

- Bromodichloromethane
- Dibromochloromethane
- 1,1,-Dichloroethylene
- *cis*-1,2-Dichloroethylene
- *trans*-1,2-Dichloroethylene
- Methylene chloride

Certificate will reflect actual cis/trans ratio

M-502C-03 Alternate Source — **1 x 1 mL**
M-502C-03-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 9 comps.

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

M-502C-04 Alternate Source — **1 x 1 mL**
M-502C-04-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 14 comps.

- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane
- 1,2-Dichloroethane
- 1,2-Dichloropropane
- 1,3-Dichloropropane
- 1,1-Dichloropropylene
- *cis*-1,3-Dichloropropene
- *trans*-1,3-Dichloropropene
- Hexachlorobutadiene
- 1,1,1,2-Tetrachloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- Trichloroethylene
- 1,2,3-Trichloropropane

Certificate will reflect actual cis/trans ratio

M-502C-05 Alternate Source — **1 x 1 mL**
M-502C-05-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 13 comps.

- Benzene
- Bromobenzene
- *n*-Butylbenzene
- Ethylbenzene
- *p*-Isopropyltoluene
- Naphthalene
- Styrene
- Toluene
- 1,2,3-Trichlorobenzene
- 1,2,4-Trichlorobenzene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- *m*-Xylene

M-502C-06 Alternate Source — **1 x 1 mL**
M-502C-06-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 12 comps.

- *sec*-Butylbenzene
- *tert*-Butylbenzene
- Chlorobenzene
- 2-Chlorotoluene
- 4-Chlorotoluene
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- Isopropylbenzene
- *n*-Propylbenzene
- *o*-Xylene
- *p*-Xylene

Volatile Organic Compounds (VOCs)

Method 502.2 (continued) Volatile Organic Compounds

The solutions below have been designed in cooperation with laboratories in the Contract Laboratory Program and have proven useful in this particular configuration for the separation and quantitation of all of the 60 components on a single column.

Method 502.2 VOC Set

M-502D-E-F-SET **3 x 1 mL** (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-Dichloroethene
- *trans*-1,2-Dichloroethene
- Dichlorodifluoromethane
- 2,2-Dichloropropane
- Ethyl benzene
- 1,2-Dibromoethane
- 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-Dichloroethene
- 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

Certificate will reflect actual cis/trans ratio

Mix F

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

- Bromodichloromethane
- *n*-Butylbenzene
- *t*-Butylbenzene
- Chloroform
- 1,2-Dibromo-3-chloropropane
- 1,3-Dichloropropane
- 1,1-Dichloropropene
- *p*-Isopropyltoluene
- Naphthalene
- *n*-Propylbenzene
- 1,1,2,2-Tetrachloroethane
- 1,3,5-Trimethyl benzene
- *p*-Xylene

Wisconsin DNR VOC Mix

S-989 **1 x 1 mL**
2.0 mg/mL each in MeOH 52 comps.

- Benzene
- Bromobenzene
- Bromodichloromethene
- *n*-Butylbenzene
- *sec*-Butylbenzene
- *t*-Butylbenzene
- Carbon tetrachloride
- Chlorobenzene
- Dibromochloromethane
- Chloroethane
- Chloroform
- Chloromethane
- 2-Chlorotoluene
- 4-Chlorotoluene
- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane
- 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
- Diisopropyl ether
- Ethylbenzene
- Hexachlorobutadiene
- Isopropylbenzene
- *p*-Isopropyltoluene
- Methylene chloride
- MtBE
- Naphthalene
- *n*-Propylbenzene
- 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
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Vinyl chloride
- *o*-Xylene
- *m*-Xylene
- *p*-Xylene

Certificate will reflect actual cis/trans ratio

Internal, Surrogate and Fortification Standards

Internal Standard

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

Internal Standard 2

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_2

Internal Standard 3

M-502-IS-2-3 **1 x 1 mL**
2.0 mg/mL in MeOH

- Methylene chloride-d_2

Internal Standard

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_4
- Fluorobenzene

Internal Standard 2

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_4
- 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_4

Technical Note

Special Considerations for Volatile Analytes

Volatile Analytes, especially gases, can be troublesome to analyze. To provide the best possible standard we suggest the following procedures:

1. Keep the ampules cool (follow the storage conditions on the label).
2. Prior to use, invert the ampule several times to ensure the gases are in the solution, not in the headspace. Mixing too vigorously can cause the gases to be lost as well.
3. Use freshly opened ampules whenever possible.
4. When transferring, take care to avoid losses of the very volatile components. For example, holding the barrel of a syringe in your hand can warm it enough to lose some of the most volatile components.
5. If using the purge and trap (PT) system is giving questionable results, try a direct liquid injection. If the results are not as expected, there may be a problem with the PT apparatus.

Volatile Organic Compounds (VOCs)

Method 503.1 Purgeable Aromatics & Alkenes

Purgeable Aromatics & Alkenes

M-503 **1 x 1 mL**
M-503-PAK ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH 28 comps.

Benzene	4-Isopropyltoluene
Bromobenzene	Naphthalene
n-Butylbenzene	*n*-Propylbenzene
sec-Butylbenzene	Styrene
t-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	*o*-Xylene
Hexachlorobutadiene	*m*-Xylene
Isopropylbenzene	*p*-Xylene

Internal Standard

M-602-SS **1 x 1 mL**
M-602-SS-PAK ***SAVE*** **5 x 1 mL**
0.2 mg/mL in MeOH

α,α,α-Trifluorotoluene

Method 504 EDB & DBCP by ECD

EDB & DBCP

M-504 **1 x 1 mL**
M-504-PAK ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH 2 comps.

M-504-10X **1 x 1 mL**
M-504-10X-PAK ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH 2 comps.

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

Method 524.2 Volatile Organic Compounds by GC/MS

Addition to Method 524.2 (Revision 4.0 August 1992)

M-524R-B ❄ **1 x 1 mL**
M-524R-B-PAK ❄ ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH 24 comps.

Acetone	2-Hexanone
Acrylonitrile	Methacrylonitrile
Allyl chloride	Methyl acrylate
2-Butanone	Methyl iodide
Carbon disulfide	Methyl methacrylate
Chloroacetonitrile	4-Methyl-2-pentanone
1-Chlorobutane	MtBE
trans-1,4-Dichloro-2-butene	Nitrobenzene
1,1-Dichloropropanone	2-Nitropropane
Diethyl ether	Pentachloroethane
Ethyl methacrylate	Propionitrile
Hexachloroethane	Tetrahydrofuran

Technical Note

Standards containing aldehydes and ketones in methanol are given short expiration periods because of their tendency to form acetals and ketals. Stabilizers are added to inhibit this reaction.

Method 524.2 VOCs by GC/MS (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 Methylene chloride-d_2
Fluorobenzene

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_4 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
M-524-IS-2-10X **1 x 1 mL**
20 mg/mL in MeOH

Fluorobenzene

Fortification Standard

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 Fluorobenzene
1,2-Dichlorobenzene-d_4

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_4

GC/MS Tuning Solution

M-624-SS-03-10X **1 x 1 mL**
2.0 mg/mL each in MeOH

p-Bromofluorobenzene

Volatile Organic Compounds (VOCs)

Method 551 Chlorinated Organic Solvents + Trihalomethanes by GC/ECD

M-551A **1 x 1 mL**
M-551A-PAK ***SAVE*** **5 x 1 mL**
5.0 mg/mL each in MeOH 10 comps.

- Bromodichloromethane
- Bromoform
- Carbon tetrachloride
- Chlorodibromomethane
- Chloroform
- 1,2-Dibromoethane
- 1,2-Dibromo-3-chloropropane
- Tetrachloroethene
- 1,1,1-Trichloroethane
- Trichloroethene

Disinfection By-products

M-551B **1 x 1 mL**
5.0 mg/mL each in Acetone 8 comps.

M-551B-SET **8 x 1 mL**
Each at 5.0 mg/mL in Acetone

	Cat. No.	Unit
Bromochloroacetonitrile	M-551B-1	1 mL
Chloral hydrate	M-551B-2	1 mL
Chloropicrin	M-551B-3	1 mL
Dibromoacetonitrile	M-551B-4	1 mL
Dichloroacetonitrile	M-551B-5	1 mL
1,1-Dichloro-2-propanone	M-551B-6	1 mL
Trichloroacetonitrile	M-551B-7	1 mL
1,1,1-Trichloro-2-propanone	M-551B-8	1 mL

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

Chlorinated Organic Solvents + Trihalomethanes

M-551.1A **1 x 1 mL**
M-551.1A-PAK ***SAVE*** **5 x 1 mL**
At stated conc. (µg/mL) in Acetone 12 comps.

Bromodichloromethane	1000
Bromoform	1000
Carbon tetrachloride	500
Chloroform	1000
Dibromochloromethane	1000
1,2-Dibromo-3-chloropropane	1000
1,2-Dibromoethane	1000
Tetrachloroethene	500
1,1,1-Trichloroethane	1000
1,1,2-Trichloroethane	10,000
Trichloroethene	1000
1,2,3-Trichloropropane	10,000

Disinfection By-products

M-551.1B **1 x 1 mL**
M-551.1B-PAK ***SAVE*** **5 x 1 mL**
1000 µg/mL each in Acetone 8 comps.

- Bromochloroacetonitrile
- Chloral hydrate
- Chloropicrin
- Dibromoacetonitrile
- Dichloroacetonitrile
- 1,1-Dichloro-2-propanone
- Trichloroacetonitrile
- 1,1,1-Trichloro-2-propanone

Pesticide/Herbicide Mixture

M-551.1C **1 x 1 mL**
M-551.1C-PAK ***SAVE*** **5 x 1 mL**
At stated conc. (µg/mL) in Acetone 17 comps.

Alachlor	10	Hexachlorobenzene	1
Atrazine	200	Hexachlorocyclopentadiene	1
Bromacil	10	Lindane	1
Cyanazine	30	Methoxychlor	5
Endrin	2	Metolachlor	10
Endrin aldehyde	2	Metribuzin	5
Endrin ketone	2	Simazine	200
Heptachlor	1	Trifluralin	1
Heptachlor epoxide (Isomer B)	1		

Method 556/556.1 Carbonyl Compounds by PFBHA Derivative with analysis by GC/ECD

Mix A

M-556-MIXA **1 x 1 mL**
1.0 mg/mL each in AcCN 13 comps.

- Acetaldehyde
- Benzaldehyde
- Butanal
- Crotonaldehyde
- Cyclohexanone
- Decanal
- Formaldehyde
- Heptanal
- Hexanal
- Nonanal
- Octanal
- Pentanal
- Propanal

Mix B

M-556-MIXB **1 x 1 mL**
1.0 mg/mL each in AcCN 2 comps.

- Glyoxal
- Methyl glyoxal

Technical Note

M-556 was designed to meet both versions of the carbonyl method. The difference between method 556 and 556.1 is that crotonaldehyde has been removed from the 556.1 method.

M-556 is to be used as a procedural standard for calibration of the method. As a procedural calibration standard it should be carried through the entire extraction and derivatization procedure associated with the samples. The oxime derivatives are analyzed by GC/ECD.

We have the capability to manufacture the actual oxime derivatives.

Internal Standard

M-556-IS **1 x 1 mL**
M-556-IS-PAK ***SAVE*** **5 x 1 mL**
10 mg/mL in Hexane

- 1,2-Dibromopropane

Surrogate Standards

M-556-SS **1 x 1 mL**
M-556-SS-PAK ***SAVE*** **5 x 1 mL**
20 µg/mL in AcCN

M-556-SS-100X **1 x 1 mL**
M-556-SS-100X-PAK ***SAVE*** **5 x 1 mL**
2.0 mg/mL in AcCN

- 2',4',5'-Trifluoroacetophenone

PFBHA Reagent

M-556-DER-10ML **1 x 10 mL**
M-556-DER-10ML-PAK ***SAVE*** **5 x 10 mL**
15 mg/mL in Water

- O-(2,3,4,5,6-Pentafluorobenzyl)hydroxylamine hydrochloride

Working Level (Internal Standard)

M-556-IS-WL-5ML-VAP **10 x 5 mL**
400 µg/L in Hexane

- 1,2-Dibromopropane

Technical Note

1. Method 551.1A analytes are formulated into **3 separate solutions** to meet various analytical laboratory testing requirements. Each solution is intended for use as a stand-alone formulation or in combination with the other two solutions.
2. **Chloral hydrate** is a DEA schedule IV drug. AccuStandard has the necessary license and exemption approval to offer this analyte in a multi-component formulation. This multi-component formulation containing chloral hydrate is tested for stability. In addition, the solution is manufactured in small batches to ensure the freshest product.

Using the 3 mixture version not only provides versatility but also eliminates running two separate 5 point calibration curves (one for the core analytes and a separate Chloral hydrate curve).

Volatile Organic Compounds (VOCs)

Method 601 Purgeable Halocarbons by Purge & Trap - GC/MS

Purgeable Halocarbon Sets

M-601-SET — **4 x 1 mL**
0.2 mg/mL each in MeOH — M-601A, M-502B, M-601C, M-501

M-601-10X-SET — **4 x 1 mL**
2.0 mg/mL each in MeOH — M-601A-10X, M-502B-10X, M-601C-10X, M-501-10X

Liquids

M-601A — **1 x 1 mL**
M-601A-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH — 18 comps.

M-601A-10X — **1 x 1 mL**
M-601A-10X-PAK — ***SAVE*** **5 x 1 mL**
20 mg/mL each in MeOH — 18 comps.

- Carbon tetrachloride
- Chlorobenzene
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,1-Dichloroethylene
- *trans*-1,2-Dichloroethylene
- 1,2-Dichloropropane
- *cis*-1,3-Dichloropropylene
- *trans*-1,3-Dichloropropylene
- Methylene chloride
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethylene
- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- Trichloroethylene

Certificate will reflect actual cis/trans ratio

Gases

M-502B — **1 x 1 mL**
M-502B-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH — 6 comps.

M-502B-10X — **1 x 1 mL**
M-502B-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 6 comps.

- Bromomethane
- Chloromethane
- Chloroethane
- Dichlorodifluoromethane
- Trichlorofluoromethane
- Vinyl chloride

Liquid Component

M-601C — **1 x 1 mL**
M-601C-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH

M-601C-10X — **1 x 1 mL**
M-601C-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH

- 2-Chloroethylvinyl ether

Trihalomethanes

M-501 — **1 x 1 mL**
M-501-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH — 4 comps.

M-501-10X — **1 x 1 mL**
M-501-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 4 comps.

- Bromoform
- Chloroform
- Dichlorobromomethane
- Dibromochloromethane

Technical Note

Bromoform, Chloroform and other light volatiles may exhibit reduced response from a contaminated trap, un-optimized purge & trap conditions, i.e. purge flow too high / low, or contamination / cold spot in the transfer line.

Purgeable Internal Standards

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

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

Purgeable Halocarbon Mix

Alternate Source

M-601-ASL — **1 x 1 mL**
M-601-ASL-PAK — ***SAVE*** **5 x 1 mL**
100 µg/mL each in MeOH — 28 comps.

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

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

Performance Check Solution

Alternate Source

S-532-ASL — **1 x 1 mL**
S-532-ASL-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH — 8 comps.

- Benzene
- Carbon tetrachloride
- 1,4-Dichlorobenzene
- 1,2-Dichloroethane
- 1,1-Dichloroethene
- 1,1,1-Trichloroethane
- Trichloroethene
- Vinyl chloride

Technical Note

Two alternate approaches to perform Method 601 analysis:

Option 1 Use of the 4 ampule set (M-601) allows you to differentiate the more volatile analytes (M-502B) or less stable analytes (M-601C) and the THMs from the stable Method 601 liquids, which can then be ordered less frequently to optimize economy.

Option 2 The M-601-ASL formulation will serve as a convenient single injection standard for all analytes other than 2-chloroethylvinyl ether. It can also be used as a second source or QC standard.

Volatile Organic Compounds (VOCs)

Method 601/602 Purgeable Halocarbons by GC/MS

Purgeable Halocarbons & Aromatics

M-601-602 — **1 x 1 mL**
M-601-602-PAK — ***SAVE* 5 x 1 mL**
0.2 mg/mL each in MeOH — 25 comps.

- Benzene
- Bromoform
- Carbon tetrachloride
- Chlorobenzene
- Chloroform
- Dibromochloromethane
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- Dichlorobromomethane
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,1-Dichloroethylene
- *trans*-1,2-Dichloroethylene
- 1,2-Dichloropropane
- *cis*-1,3-Dichloropropylene
- trans-1,3-Dichloropropylene
- Ethylbenzene
- Methylene chloride
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethylene
- Toluene
- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- Trichloroethylene

Certificate will reflect actual cis/trans ratio

Gases

M-601B — **1 x 1 mL**
M-601B-PAK — ***SAVE* x 1 mL**
0.2 mg/mL each in MeOH — 6 comps.

- Bromomethane
- Chloromethane
- Chloroethane
- Dichlorodifluoromethane
- Trichlorofluoromethane
- Vinyl chloride

Liquids

M-601C — **1 x 1 mL**
M-601C-PAK — **SAVE 5 x 1 mL**
0.2 mg/mL in MeOH

M-601C-10X — **1 x 1 mL**
M-601C-10X-PAK — ***SAVE* 5 x 1 mL**
2.0 mg/mL in MeOH

- 2-Chloroethylvinyl ether

Purgeable Aromatics

M-602 — **1 x 1 mL**
M-602-PAK — ***SAVE* 5 x 1 mL**
0.2 mg/mL each in MeOH — 7 comps.

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

Purgeable Aromatics - Gasoline ID

M-602-GAS — **1 x 1 mL**
M-602-GAS-PAK — ***SAVE* 5 x 1 mL**
0.2 mg/mL each in MeOH — 11 comps.

M-602-GAS-10X — **1 x 1 mL**
M-602-GAS-10X-PAK — ***SAVE* 5 x 1 mL**
2.0 mg/mL each in MeOH — 11 comps.

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

Surrogate Standard

M-602-SS — **1 x 1 mL**
M-602-SS-PAK — ***SAVE* 5 x 1 mL**
0.2 mg/mL in MeOH

M-602-SS-100X — **$ 20 / 1 x 1 mL**
20 mg/mL in MeOH

- α,α,α-Trifluorotoluene

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

M-601-CHG — **1 x 1 mL**
M-601-CHG-PAK — ***SAVE* 5 x 1 mL**
100 µg/mL each in MeOH — 35 comps.

- Benzene
- Bromodichloromethane
- Bromoform
- Bromomethane
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane
- Chloroform
- Chloromethane
- Dibromochloromethane
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- Dichlorodifluoromethane
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,1-Dichloroethene
- *trans*-1,2-Dichloroethene
- 1,2-Dichloropropane
- *cis*-1,3-Dichloropropene *
- *trans*-1,3-Dichloropropene **
- Dichloromethane
- Ethylbenzene
- MtBE
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethene
- Toluene
- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- Trichloroethene
- Trichlorofluoromethane
- *m*-Xylene
- *o*-Xylene
- *p*-Xylene
- Vinyl chloride

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

Technical Note

AccuStandard designed two sets of formulations for those laboratories analyzing Method 601/602 analytes by PID/HALL in series allowing for simultaneous screening for gasoline contamination:

M-601/602 The first set of formulations provide the analytical chemist with the method analytes in a core mix of liquids and a separate mix of the more volatile gases. By providing the six gases in a separate solution the chemist can replace the volatile gases on a more frequent basis.

M-601-CHG The second formulation has the Method 601/602 analytes plus the oxygenate MtBE in one convenient solution. Since the oxygenate MtBE is added to gasoline, its presence on a chromatogram can provide early detection of gasoline contamination at the monitoring well.

Target Analytes

M-601-602-BTEX — **1 x 1 mL**
0.2 mg/mL each in MeOH — 26 comps.

M-601-602-BTEX-10X — **1 x 1 mL**
2.0 mg/mL each in MeOH — 26 comps.

- Benzene
- Carbon tetrachloride
- Chlorobenzene
- Ethylbenzene
- MtBE
- Methylene chloride
- Tetrachloroethene
- Toluene
- Trichloroethene
- *cis*-1,3-Dichloropropene
- *cis*-1,2-Dichloroethene
- *trans*-1,2-Dichloroethene
- *trans*-1,3-Dichloropropene
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- 1,1-Dichloroethane
- 1,1-Dichloroethene
- 1,2-Dichlorobenzene
- 1,2-Dichloroethane
- 1,2-Dichloropropane
- *o*-Xylene
- *m*-Xylene
- *p*-Xylene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene

Technical Note

Tetrachloroethane and 1,1-Dichloroethane can degrade on contaminated purge & trap transfer lines or old traps.

Gasoline Oxygenate - MtBE

S-078 — **1 x 1 mL**
200 µg/mL in MeOH

S-078-10X — **1 x 1 mL**
2.0 mg/mL in MeOH

- Methyl *t*-butyl ether (*MtBE*)

Volatile Organic Compounds (VOCs)

Method 603 Acrolein & Acrylonitrile by GC/FID

M-603 **1 x 1 mL**
M-603-PAK ***SAVE*** **5 x 1 mL**
1.0 mg/mL each in Water 2 comps.

M-603-10X **1 x 1 mL**
10 mg/mL each in Water 2 comps.

M-603-M-0.1X ❄ **1 x 1 mL**
0.1 mg/mL each in MeOH:Water (90:10) 2 comps.

M-603-M-5X ❄ **1 x 1 mL**
5.0 mg/mL each in MeOH:Water (90:10) 2 comps.

Acrolein
Acrylonitrile

Method 624 Purgeables by GC/MS

Purgeables

M-624 **1 x 1 mL**
0.2 mg/mL each in MeOH 31 comps.

Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon tetrachloride
Chlorobenzene
Chloroethane
2-Chloroethyl vinyl ether
Chloroform
Chloromethane
Dibromochloromethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Methylene chloride
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
Vinyl chloride

Certificate will reflect actual cis/trans ratio

Technical Note

Tetrachloroethane and 1,1-Dichloroethane can degrade on contaminated purge & trap transfer lines or old traps.

Surrogates

*Each at 0.2 mg/mL in MeOH, except * in AcCN*

Component	Cat. No.	Unit
Benzene-d_6	M-624-SS-01	1 mL
Bromochloromethane	M-624-SS-02	1 mL
4-Bromofluorobenzene	M-624-SS-03	1 mL
2-Bromo-1-chloropropane	M-624-SS-04	1 mL
1,4-Dichlorobutane	M-624-SS-05	1 mL
1,2-Dichloroethane-d_4	M-624-SS-06	1 mL
1,4-Difluorobenzene	M-624-SS-07	1 mL
Ethylbenzene-d_{10}	M-624-SS-08	1 mL
Fluorobenzene	M-624-SS-09	1 mL
Pentafluorobenzene	M-624-SS-10	1 mL
1,2-Dichlorobenzene-d_4	M-624-SS-11	1 mL
2-Bromochlorobenzene	M-624-SS-12	1 mL
4-Chlorofluorobenzene	M-624-SS-13	1 mL
a,a,a-Trichlorotoluene	M-624-SS-14-CN *	1 mL

Surrogate Standards

M-624-SS-M **1 x 1 mL**
M-624-SS-M-PAK ***SAVE*** **5 x 1 mL**
20 mg/mL each in MeOH 3 comps.

4-Bromofluorobenzene
Fluorobenzene
Pentafluorobenzene

Internal Standard

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

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

❄ ColdPAK required to maintain integrity of product.

Volatile Organic Compounds (VOCs)

Method 1666A (Rev. July 1998) Volatile Organic Compounds Specific to the PMI by Isotope Dilution GC/MS

PMI Purgeable Analytes

M-1666A-R2-SET **5 x 1 mL**
M-1666A-SSA-ADD, M-1666A-SSA-R2, M-1666A-SSB
M-1666A-SSC, M-1666A-LAB

M-1666A-SSA-ADD **1 x 1 mL**
1000 µg/mL in MeOH

Isopropyl ether

PMI Stock Standard A

M-1666A-SSA-R2 **1 x 1 mL**
At stated conc. (µg/mL) in Water 7 comps.

n-Butanol	2500	Isopropanol	1000
t-Butanol	2500	4-Methyl-2-pentanone	1000
2-Furaldehyde	2500	*n*-Pentanol	2500
Isobutyraldehyde	2500		

PMI Stock Standard B

M-1666A-SSB **1 x 1 mL**
At stated conc. (µg/mL) in MeOH 9 comps.

Cyclohexane	1000	Trifluoromethane	1000
n-Heptane	1000	*m*-Xylene	1000
n-Hexane	1000	*o*-Xylene	1000
Methyl formate	2500	*p*-Xylene	1000
Tetrahydrofuran	1000		

PMI Stock Standard C

M-1666A-SSC **1 x 1 mL**
1000 µg/mL each in MeOH 4 comps.

Butyl acetate	Isopropyl acetate
Ethyl acetate	Pentyl acetate

PMI Labeled Stock Standard

M-1666A-LAB **1 x 1 mL**
At stated conc. (µg/mL) in MeOH 8 comps.

t-Butanol-d_{10}	500	*n*-Hexane-d_{14}	50
Cyclohexane-d_{12}	50	Tetrahydrofuran-d_8	50
Ethyl Acetate-2-^{13}C	50	*o*-Xylene-d_{10}	50
n-Heptane-d^{16}	50	*m*-Xylene-d_{10}	50

PMI Direct Injection Set

M-1666A-DI-R1-SET **4 x 1 mL**
M-1666A-DI-R1, M-1666A-DI-R-ADD1
M-1666A-DI-R-ADD2, M-1666A-DI-LAB

PMI Standard Direct Injection

M-1666A-DI-R1 **1 x 1 mL**
At stated conc. (µg/mL) in Water 10 comps.

Acetonitrile	1000	Ethylene glycol	2500
Diethylamine	2500	Methanol	1000
Dimethylamine	1000	2-Methoxyethanol	1000
Dimethyl sulfoxide	1000	*n*-Propanol	1000
Ethanol	1000	Triethylamine	2500

M-1666A-DI-R-ADD1 **1 x 1 mL**
2500 µg/mL in Water

Methylamine

M-1666A-DI-R-ADD2 **1 x 1 mL**
5000 µg/mL in Water

Formamide

PMI Labeled Standard Direct Injection

M-1666A-DI-LAB **1 x 1 mL**
1000 µg/mL each in Water 6 comps.

Acetonitrile-d_3	Methanol-d_3
Dimethyl sulfoxide-d_6	*n*-Propanol-1-d_1
Ethanol-d_6	Tetrahydrofuran-d_8

PMI Instrument Performance

Purgeable Internal Standard

CLP-PI **1 x 1 mL**
CLP-PI-PAK ***SAVE*** **5 x 1 mL**
1.0 mg/mL each in MeOH 3 comps.

Bromochloromethane	1,4-Difluorobenzene
Chlorobenzene-d_5	

PMI Resolution Standard

M-1666A-RES **1 x 1 mL**
M-1666A-RES-PAK ***SAVE*** **5 x 1 mL**
100 µg/mL each in MeOH 2 comps.

o-Xylene	*o*-Xylene-d_{10}

Instrument Performance Check Solution

CLP-004-10X **1 x 1 mL**
CLP-004-10X-PAK ***SAVE*** **x 1 mL**
250 µg/mL in MeOH

p-Bromofluorobenzene

Volatile Organic Compounds (VOCs)

Method 8010 Halogenated VOCs by GC/ELCD (Hall)

Method 8010 Purgeable Halocarbon Set

M-601-SET — **4 x 1 mL**
0.2 mg/mL in MeOH — M-601A, M-502B, M-601C, M-501

M-601-10X-SET — **4 x 1 mL**
2.0 mg/mL in MeOH — M-601A-10X, M-502B-10X, M-601C-10X, M-501-10X

Liquids

M-601A — **1 x 1 mL**
M-601A-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH

M-601A-10X — **1 x 1 mL**
2.0 mg/mL each in MeOH — 18 comps.

- Carbon tetrachloride
- Chlorobenzene
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,1-Dichloroethylene
- *trans*-1,2-Dichloroethylene
- 1,2-Dichloropropane
- *cis*-1,3-Dichloropropylene *
- *trans*-1,3-Dichloropropylene **
- Methylene chloride
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethylene
- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- Trichloroethylene

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

Gases

M-502B — **1 x 1 mL**
M-502B-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH

M-502B-10X — **1 x 1 mL**
2.0 mg/mL each in MeOH — 6 comps.

- Bromomethane
- Chloromethane
- Chloroethane
- Dichlorodifluoromethane
- Trichlorofluoromethane
- Vinyl chloride

Liquid Component

M-601C — **1 x 1 mL**
M-601C-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL in MeOH

M-601C-10X — **1 x 1 mL**
2.0 mg/mL in MeOH

- Chloromethyl methyl ether

Trihalomethanes

M-501 — **1 x 1 mL**
M-501-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH

M-501-10X — **1 x 1 mL**
2.0 mg/mL each in MeOH — 4 comps.

- Bromoform
- Chloroform
- Dichlorobromomethane
- Dibromochloromethane

Method 8010 Additional Analytes

M-8010R-1 — **1 x 1 mL**
0.2 mg/mL each in MeOH — 9 comps.

- Benzylchloride
- Bromobenzene
- bis(2-Chloroethoxy)methane
- 1-Chlorohexane
- Chloromethylmethyl ether
- 4-Chlorotoluene
- Dibromomethane
- 1,1,1,2-Tetrachloroethane
- 1,2,3-Trichloropropane

Surrogate Standard

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

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

Halogenated VOCs by GC/ECLD (Hall)

M-8010A-SET — **2 x 1 mL** (M-8010A-M, M-601C)

Method 8010A (Methanol Version)

M-8010A-M — **1 x 1 mL**
0.2 mg/mL each in MeOH — 33 comps.

- Benzyl chloride
- Bromobenzene
- Bromoform
- Bromomethane
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane
- Chloroform
- Chloromethane
- Dibromochloromethane
- Dibromomethane
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- Dichlorobromomethane
- Dichlorodifluoromethane
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,1-Dichloroethylene
- *trans*-1,2-Dichloroethylene
- 1,2-Dichloropropane
- *cis*-1,3-Dichloropropylene *
- *trans*-1,3-Dichloropropylene **
- Methylene chloride
- 1,1,1,2-Tetrachloroethane
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethylene
- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- Trichloroethylene
- Trichlorofluoromethane
- 1,2,3-Trichloropropane
- Vinyl chloride

***Certificate will reflect actual cis/trans ratio**

M-601C — **1 x 1 mL**
0.2 mg/mL in MeOH

- 2-Chloroethylvinyl ether

❄ ColdPAK required to maintain integrity of product.

Method 8010A Acetonitrile Version

Method 8010A (Acetonitrile Version)

M-8010A — **1 x 1 mL**
0.2 mg/mL each in AcCN — 34 comps.

- Benzyl chloride
- Bromobenzene
- Bromoform
- Bromomethane
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane
- 2-Chloroethyl vinyl ether
- Chloroform
- Chloromethane
- Dibromochloromethane
- Dibromomethane
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- Dichlorobromomethane
- Dichlorodifluoromethane
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,1-Dichloroethylene
- *trans*-1,2-Dichloroethylene
- 1,2-Dichloropropane
- *cis*-1,3-Dichloropropylene
- *trans*-1,3-Dichloropropylene
- Methylene chloride
- 1,1,1,2-Tetrachloroethane
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethylene
- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- Trichloroethylene
- Trichlorofluoromethane
- 1,2,3-Trichloropropane
- Vinyl chloride

Certificate will reflect actual cis/trans ratio

Internal & Surrogate Standard

M-8010-IS-SS — **1 x 1 mL**
M-8010-IS-SS-PAK — ***SAVE*** **5 x 1 mL**
150 µg/mL each in MeOH — 3 comps.

- 4-Bromochlorobenzene
- 4-Bromofluorobenzene
- Bromochloromethane

Volatile Organic Compounds (VOCs)

Method 8010B Halogenated VOCs by GC/ELCD (Hall)

Halogenated Volatiles (Methanol Versions)

Mix #1

M-8010B — **1 x 1 mL**
0.2 mg/mL each in MeOH — 40 comps.

- Allyl chloride
- Bromobenzene
- Bromoform
- Bromomethane
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane
- 2-Chloroethanol
- Chloroform
- 1-Chlorohexane
- Chloromethane
- 4-Chlorotoluene
- Dibromochloromethane
- 1,2-Dibromo-3-chloropropane
- Dibromomethane
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- Dichlorobromomethane
- 1,4-Dichloro-2-butene
- Dichlorodifluoromethane
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,1-Dichloroethene
- *trans*-1,2-Dichloroethene
- 1,2-Dichloropropane
- 1,3-Dichloro-2-propanol
- *cis*-1,3-Dichloropropene *
- *trans*-1,3-Dichloropropene **
- 1,2-Dibromoethane
- Methylene chloride
- 1,1,1,2-Tetrachloroethane
- 1,1,2,2-Tetrachloroethane
- Tetrachloroethene
- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- Trichloroethene
- Trichlorofluoromethane
- 1,2,3-Trichloropropane
- Vinyl chloride

*** Certificate will reflect actual cis/trans ratio**

Mix #2

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

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

Internal and Surrogate Standard

M-8010-IS-SS — **1 x 1 mL**
M-8010-IS-SS-PAK — ***SAVE*** **5 x 1 mL**
150 µg/mL each in MeOH — 3 comps.

- 4-Bromochlorobenzene
- Bromochloromethane
- 4-Bromofluorobenzene

Surrogate Standard

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

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

Halogenated Volatiles

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

- Bromoacetone
- Chloromethyl methyl ether

APP-9-030 — **1 x 1 mL**
100 µg/mL in MeOH

- Bromodichloromethane

APP-9-130 — **1 x 1 mL**
100 µg/mL in MeOH

- Methyl iodide

Chloroprene (Xylene-Free)

APP-9-048-R1 — **1 x 1 mL**
100 µg/mL in MeOH

APP-9-048-R1-2X — **1 x 1 mL**
200 µg/mL in MeOH

APP-9-048-R1-20X — **1 x 1 mL**
2000 µg/mL in MeOH

- Chloroprene

Method 8011 DBCP & EDB by GC/MS

M-504-10X — **1 x 1 mL**
M-504-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 2 comps.

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

Method 8015B Non-Halogenated Organics by GC/FID

M-8015B-5031-R-SET ❄ — **27 x 1 mL**
Each at 10 mg-mL in Water

Compound	Cat. No.	Unit
Acetone	M-8015B-5031-01	1 mL
Acetonitrile	M-8015B-5031-02	1 mL
Acrolein	M-8015B-5031-03	1 mL
Acrylonitrile	M-8015B-5031-04	1 mL
Allyl alcohol	M-8015B-5031-05	1 mL
n-Butanol	M-8015B-5031-06	1 mL
t-Butanol	M-8015B-5031-07	1 mL
Crotonaldehyde	M-8015B-5031-08	1 mL
Diethyl ether	M-8015B-5031-09	1 mL
p-Dioxane	M-8015B-5031-10	1 mL
Ethanol	M-8015B-5031-11	1 mL
Ethyl acetate	M-8015B-5031-12	1 mL
Ethylene glycol	M-8015B-5031-13	1 mL
Ethylene oxide (5.0 mg/mL) *	M-8015B-5031-14-R1 ❄	1 mL
Isobutanol	M-8015B-5031-15	1 mL
Isopropanol	M-8015B-5031-16	1 mL
Methanol	M-8015B-5031-17	1 mL
Methyl ethyl ketone	M-8015B-5031-18	1 mL
4-Methyl-2-pentanone	M-8015B-5031-19	1 mL
N-Nitrosodi-*n*-butylamine (0.5 mg/mL)	M-8015B-5031-20	25
Paraldehyde	M-8015B-5031-21	25
2-Pentanone	M-8015B-5031-22	25
2-Picoline	M-8015B-5031-23	25
n-Propanol	M-8015B-5031-24	25
Propionitrile	M-8015B-5031-25	25
Pyridine	M-8015B-5031-26	25
o-Toluidine	M-8015B-5031-27	25

[redacted]

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

M-8260-5031-IS-FID — **1 x 1 mL**
5.0 mg/mL each in Water — 3 comps.

- 2-Chloroacetonitrile
- Hexafluoro-2-methyl-2-propanol
- Hexafluoro-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 can be found in LUFT/LUST.

❄ ColdPAK required to maintain integrity of product.

Volatile Organic Compounds (VOCs)

Method 8020 Aromatic Volatiles by PID

Aromatic Volatile Analytes

M-8020 — **1 x 1 mL**
0.2 mg/mL each in MeOH — 10 comps.

M-8020-10X — **1 x 1 mL**
M-8020-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 10 comps.

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

M-8020B-R1 — **1 x 1 mL**
M-8020B-R1-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 13 comps.

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

Performance Check Solution

M-8020-QC — **1 x 1 mL**
M-8020-QC-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL in MeOH

MtBE

Internal Standards

M-8020-IS — **1 x 1 mL**
M-8020-IS-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH — 2 comps.

M-8020-IS-10X — **1 x 1 mL**
M-8020-IS-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 2 comps.

4-Bromofluorobenzene
α,α,α-Trifluorotoluene

Surrogate Standards

M-8020-SS — **1 x 1 mL**
M-8020-SS-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 3 comps.

4-Bromochlorobenzene
1,4-Difluorobenzene
Fluorobenzene

M-8020-SS-1 — **1 x 1 mL**
2.0 mg/mL each in MeOH

4-Bromochlorobenzene

Combined ISTD/SS Solution

M-8020-IS-SS-ASL — **1 x 1 mL**
M-8020-IS-SS-ASL-PAK Alternate Source — ***SAVE*** **5 x 1 mL**
1.5 mg/mL each in MeOH — 5 comps.

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

Individual Component Neats

To order, specify identity

M-502-##N — **1 x 1 gram**

Except

M-502-##N	1 x 1 gram	
M-502-04N	M-502-28N	M-502-34N
M-502-08N	M-502-29N	M-502-43N
M-502-17N	M-502-31N	M-502-44N
M-502-18N	M-502-32N	

Method 8021B Purgeable Volatiles by PID/ELCD in Series

Method 8021 is used to determine volatile organic compounds in a variety of solid waste matrices using PID/ELCD detectors in series. AccuStandard segregated the analyte list into formulations that provide the widest adaptability to various types of samples and appropriate sample introduction techniques mentioned in the method.

54 Liquid Components

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

***Certificate will reflect actual cis/trans ratio**

6 Gas Components

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

All 60 liquid and gas components in One Solution

M-502 — **1 x 1 mL**
M-502-PAK — ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH — 60 comps.

M-502-10X — **1 x 1 mL**
M-502-10X-PAK — ***SAVE*** **5 x 1 mL**
2.0 mg/mL each in MeOH — 60 comps.

59 Component Set

A complete set of each component in individual ampules.

M-502-SET	0.2 mg/mL in MeOH	**59 x 1 mL**
M-502-10X-SET	2.0 mg/mL in MeOH	**59 x 1 mL**

Individual Component Solutions

To order, specify identity (#) and conc. (0.2 or 2.0 mg/mL)

M-502-#	0.2 mg/mL in MeOH	**1 x 1 mL**
M-502-#-10X	2.0 mg/mL in MeOH	**1 x 1 mL**

M-502-34A & M-502-34B only available as mixture: M-502-34R

M-502-34-R — **1 x 1 mL**
0.4 mg/mL each in MeOH — 2 comps.

M-502-34-R-10X — **1 x 1 mL**
4.0 mg/mL each in MeOH — 2 comps.

cis-1,3-Dichloropropene
trans-1,3-Dichloropropene

Certificate will reflect actual cis/trans ratio

Volatile Organic Compounds (VOCs)

Method 8021B Purgeable Volatiles by PID/ELCD in Series Continued

Halogenated Non-Aromatic Volatiles Solution #1

M-8021B-NAV **1 x 1 mL**
M-8021B-NAV-PAK ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH 35 comps.

- Bromochloromethane
- Bromodichloromethane
- Bromoform
- Bromomethane
- Carbon tetrachloride
- Chloroethane
- Chloroform
- Chlorodibromomethane
- Chloromethane
- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane
- Dibromomethane
- Dichlorodifluoromethane
- 1,1-Dichloroethane
- 1,2-Dichloroethane
- 1,1-Dichloroethene
- *cis*-1,2-Dichloroethene
- *trans*-1,2-Dichloroethene
- Dichloromethane
- 1,2-Dichloropropane
- 1,3-Dichloropropane
- 2,2-Dichloropropane
- 1,1-Dichloropropene
- *cis*-1,3-Dichloropropene *
- *trans*-1,3-Dichloropropene **
- Hexachlorobutadiene
- Tetrachloroethene
- 1,1,1,2-Tetrachloroethane
- 1,1,2,2-Tetrachloroethane
- Trichloroethene
- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- Trichlorofluoromethane
- 1,2,3-Trichloropropane
- Vinyl chloride

*** Certificate will reflect actual cis/trans ratio**

Aromatic Volatiles Solution #2

M-8021B-AV **1 x 1 mL**
M-8021B-AV-PAK ***SAVE*** **5 x 1 mL**
0.2 mg/mL each in MeOH 25 comps.

- Benzene
- Bromobenzene
- *n*-Butylbenzene
- *sec*-Butylbenzene
- *t*-Butylbenzene
- Chlorobenzene
- 2-Chlorotoluene
- 4-Chlorotoluene
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- Ethylbenzene
- Isopropylbenzene
- *p*-Isopropyltoluene
- Naphthalene
- *n*-Propylbenzene
- Styrene
- Toluene
- 1,2,3-Trichlorobenzene
- 1,2,4-Trichlorobenzene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- *o*-Xylene
- *m*-Xylene
- *p*-Xylene

Halogenated Volatiles Solution #3

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

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

Halogenated Volatiles Solution #4

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

- Bromoacetone
- Chloromethyl methyl ether

Method 8030A Acrolein & Acrylonitrile by GC/FID

M-603-10X **1 x 1 mL**
10 mg/mL each in Water 2 comps.

- Acrolein
- Acrylonitrile

Method 8031 Acrylonitrile by GC/NPD

APP-9-008-10X **1 x 1 mL**
APP-9-008-10X-PAK ***SAVE*** **5 x 1 mL**
1.0 mg/mL in MeOH

- Acrylonitrile

Method 8032/8032A Acrylamide by GC/ECD

Acrylamide

M-8032 **1 x 1 mL**
M-8032-PAK ***SAVE*** **5 x 1 mL**
1.0 mg/mL in MeOH

- Acrylamide

Brominated Analyte

M-8032B **1 x 1 mL**
M-8032B-PAK ***SAVE*** **5 x 1 mL**
0.1 mg/mL in Ethyl acetate

- 2,3-Dibromopropionamide

Internal Standard

M-8032-IS **1 x 1 mL**
M-8032-IS-PAK ***SAVE*** **5 x 1 mL**
0.1 mg/mL in Ethyl acetate

- Dimethyl phthalate

Method 8033 Acrylonitrile by GC/NPD

Acrylonitrile

M-8033 **1 x 1 mL**
M-8033-PAK ***SAVE*** **5 x 1 mL**
1.0 mg/mL in Water

- Acrylonitrile

❄ ColdPAK required to maintain integrity of product.

VOC Regional Standards

European Methodologies Volatiles

DIN 38407-2 Benzene Standard

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

Volatile Standard

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

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

Calibration Solution

Set of 5 ampules with a conc. each in MeOH of 1 µg/mL, 5 µg/mL, 10 µg/mL, 50 µg/mL and 100 µg/mL

Compound	Cat. No.	Unit
1,1,1-Trichloroethane	AE-00034-CAL-SET	5 x 1 mL
Tetrachloroethene	AE-00036-CAL-SET	5 x 1 mL
Dichloromethane	AE-00037-CAL-SET	5 x 1 mL
Carbon tetrachloride	AE-00038-CAL-SET	5 x 1 mL

DIN 38407-9 Benzene Mix

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

DIN EN ISO 10301 - Halogenated VOCs

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

Volatiles Calibration Curve Mix 1

AE-00039-CAL-SET **5 x 1 mL**
1 µg/mL, 5 µg/mL, 10 µg/mL, 50 µg/mL, 100 µg/mL
Each comp. in MeOH 5 comps.

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

Volatiles Calibration Curve Mix 2

AE-00040-CAL-SET **5 x 1 mL**
1 µg/mL, 5 µg/mL, 10 µg/mL, 50 µg/mL, 100 µg/mL
Each comp. in MeOH 6 comps.

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

Japan Ministry of Health and Welfare Standards

Volatile Organic Solution

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

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

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

VOC Regional Standards

Japan Environmental Agency 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
Carbon Tetrachloride
1,1-Dichloroethene
cis-1,2-Dichloroethene
Dichloromethane
1,2-Dichloroethane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Tetrachloroethene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene

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

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

Minnesota Method 465-D

List of Volatiles

Liquids

M-502A-R **1 x 1 mL**
M-502A-R-PAK **SAVE 5 x 1 mL**
0.2 mg/mL each in MeOH 54 comps.

Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
n-Butylbenzene
sec-Butylbenzene
t-Butylbenzene
Carbon tetrachloride
Chlorobenzene
Chloroform
2-Chlorotoluene
4-Chlorotoluene
Dibromochloromethane
1,2-Dibromo-3-chloropropane
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
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene (Cumene)
p-Isopropyltoluene (*p*-Cymene)
Methylene chloride
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
o-Xylene
m-Xylene
p-Xylene

Certificate will reflect actual cis/trans ratio

Gases

M-465B-10X **1 x 1 mL**
M-465B-10X-PAK **SAVE 5 x 1 mL**
0.2 mg/mL each in MeOH 7 comps.

Bromomethane
Chloroethane
Chloromethane
Dichlorodifluoromethane
Dichlorofluoromethane
Trichlorofluoromethane
Vinyl chloride

M-465D-ADD-R ❄ **1 x 1 mL**
0.2 mg/mL each in MeOH 8 comps.

Acetone
Allyl chloride
Ethyl ether
Methyl ethyl ketone
Methyl isobutyl ketone
Methyl-*t*-butyl ether
Tetrahydrofuran
Trichlorotrifluoroethane

Method 465-D Volatiles Set

M-465D-SET ❄ **3 x 1 mL**
M-465D-SET-PAK ❄ ***SAVE* 5 x (3 x 1 mL)**
M-502A-R, M-465B-10X, M-465D-ADD-R

❄ ColdPAK required to maintain integrity of product.

Wisconsin DNR VOC Mixture

S-989 **1 x 1 mL**
2.0 mg/mL each in MeOH 52 comps.

Benzene
Bromobenzene
Bromodichloromethene
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
Chloroform
Chloromethane
2-Chlorotoluene
4-Chlorotoluene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
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
Diisopropyl ether
Ethylbenzene
Hexachlorobutadiane
Isopropylbenzene
p-Isopropyltoluene
Methylene chloride
Methyl *tert*-butyl ether
Naphthalene
n-Propylbenzene
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
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl chloride
o-Xylene
m-Xylene
p-Xylene

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