



McCAMPBELL ANALYTICAL INC.

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COMPARISON OF TARGET LISTS AVAILABLE FROM MAI FOR VOLATILES BY GC-MS AND GC-ELCD / PID

VOC Compound Name	CAS Number	GC-MS				GC-ELCD / PID			
		EPA 524.2	EPA 624	EPA 8260B	CA 7 Oxys ± Pb Scav	EPA 502.2	EPA 601 & 602	EPA 8010B & 8020A	EPA 8021B
Acetone	67-64-1	(●)		●					
Acetonitrile	75-05-8			●					
Acrolein (Propenal)	107-02-8		● <sup>Q1, Z</sup>	● <sup>Q1</sup>					
Acrylonitrile	107-13-1	(●)	● <sup>Q1, Z</sup>	● <sup>Q1</sup>					
Allyl alcohol	107-18-6			●					
Allyl chloride	107-05-1	(●)		●				●	●
tert-Amyl Methyl Ether (TAME)-OXY	994-05-8	● <sup>Z</sup>		● <sup>Z</sup>	●	● <sup>Z</sup>			● <sup>Z</sup>
Benzene	71-43-2	●	●	●		●	●	●	●
Benzyl chloride (a-chlorotoluene)	100-44-7			●				●	●
Bis(2-chloroethoxy)methane	111-91-1							●	
Bis(2-chloroethyl)sulfide (Mustard gas)	505-80-2			---					
Bis (2-chloroisopropyl) ether	39638-32-9							●	●
Bromoacetone	598-31-2			●				●	●
Bromobenzene	108-86-1	●		●		(●)		●	●
Bromochloromethane	74-97-5	●		●		(●)			●
Bromodichloromethane	75-27-4	●	●	●		●	●	●	●
Bromoform	75-25-2	●	●	●		●	●	●	●
Bromomethane	74-83-9	●	●	●		(●)	●	●	●
n-Butanol	71-36-3			●					
2-Butanone (MEK)	78-93-3	●		●					
t- Butyl alcohol (TBA)-OXY	75-65-0	● <sup>Z</sup>		●	●				
n-Butylbenzene	104-51-8	●		●		(●)			●
sec-Butylbenzene	135-98-8	●		●		(●)			●
tert-Butylbenzene	98-06-6	●		●		(●)			●
tert-Butylformate	762-75-4			● <sup>Z</sup>					
Carbon disulfide	75-15-0	●		●					
Carbon tetrachloride	56-23-5	●	●	●		●	●	●	●
Chloral hydrate	302-17-0			●					
Chloroacetonitrile	107-14-2	(●)		●					
Chlorobenzene	108-90-7	●	●	●		●	●	●	●
1-Chlorobutane	109-69-3	(●)		●					
Chloroethane	75-00-3	●	●	●		●	●	●	●
2-Chloroethanol	107-07-3			●				●	●
2-Chloroethylvinyl ether	110-75-8		● <sup>Q1</sup>	● <sup>Q1</sup>			● <sup>Q1</sup>	● <sup>Q1</sup>	● <sup>Q1</sup>
Chloroform	67-66-3	●	●	●		●	●	●	●
1-Chlorohexane	544-10-5			●				●	●
Chloromethane	74-87-3	●	●	●		(●)	●	●	●
Chloromethyl methyl ether	107-30-2							●	●
Chloroprene (2-Chloro-1,3-butadiene)	126-99-8			●				●	●
3-Chloropropionitrile	542-76-7			●					
2-Chlorotoluene	95-49-8	●		●		(●)			●
4-Chlorotoluene	106-43-4	●		●		(●)		●	●
Crotonaldehyde	4170-30-3			●					
Cyanogen Chloride	506-77-4			● <sup>Z</sup>					
Dibromochloromethane	124-48-1	●	●	●		●	●	●	●



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		EPA 524.2	EPA 624	EPA 8260B	CA 7 Oxys ± Pb Scav	EPA 502.2	EPA 601 & 602	EPA 8010B & 8020A	EPA 8021B
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	● <sup>x</sup>		●		(●) <sup>x</sup>		●	●
1,2-Dibromoethane (EDB)	106-93-4	● <sup>x</sup>		●	(●)	(●) <sup>x</sup>		●	●
Dibromofluoromethane	1868-53-7			●					
Dibromomethane	74-95-3	●		●		(●)		●	●
1,2-Dichlorobenzene	95-50-1	●	●	●		●	●	●	●
1,3-Dichlorobenzene	541-73-1	●	●	●		●	●	●	●
1,4-Dichlorobenzene	106-46-7	●	●	●		●	●	●	●
trans-1, 4-Dichloro-2-butene	110-57-6	(●)		●				●	
cis-1, 4-Dichloro-2-butene	1476-11-5			●				●	
1,4-Dichloro-2-butene, total	764-41-0								
Dichlorodifluoromethane	75-71-8	● <sup>z</sup>		●		● <sup>z</sup>	●	●	●
1,1-Dichloroethane	75-34-3	●	●	●		●	●	●	●
1,2-Dichloroethane	107-06-2	●	●	●	(●)	●	●	●	●
1,1-Dichloroethene	75-35-4	●	●	●		●	●	●	●
cis-1,2-Dichloroethene	156-59-4	●	● <sup>z</sup>	●		●		● <sup>z</sup>	●
trans-1,2-Dichloroethene	156-60-5	●	●	●		●	●	●	●
1,2-Dichloroethene (total)	540-59-0								
1,2-Dichloropropane	78-87-5	●	●	●		●	●	●	●
1,3-Dichloropropane	142-28-9	●		●		(●)			●
2,2-Dichloropropane	590-20-7	●		●		(●)			●
1,3 Dichloro-2-propanol	96-23-1			●				●	●
1,1-Dichloro-2-propanone	513-88-2	(●)		● <sup>z</sup>					
1,1-Dichloropropene	563-58-6	●		●		(●)			●
cis-1,3-Dichloropropene	10061-01-5	●	●	●		●	●	●	●
trans-1,3-Dichloropropene	10061-02-6	●	●	●		●	●	●	●
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2			● <sup>z</sup>					
1,2,3,4 Diepoxybutane	298-18-0			●					
Diethyl ether	60-29-7	(●)		●					
Diisopropyl ether (DIPE)-OXY	108-20-3	● <sup>z</sup>		● <sup>z</sup>	●	● <sup>z</sup>			● <sup>z</sup>
1,4-Dioxane	123-91-1			● <sup>o2</sup>					
Epichlorohydrin	106-89-8			●				●	●
Ethanol-OXY	64-17-5			●	(●)				
Ethyl acetate	141-78-6			●					
Ethylbenzene	100-41-4	●	●	●		●	●	●	●
Ethyl tert-butyl ether (ETBE)-OXY	637-92-3	● <sup>z</sup>		● <sup>z</sup>	●	● <sup>z</sup>			● <sup>z</sup>
Ethylene oxide	75-21-8			●					
Ethyl methacrylate	97-63-2	(●)		●					
Hexachlorobutadiene	87-68-3	●	● <sup>z</sup>	●		(●)			●
Hexachloroethane	67-72-1	(●)	● <sup>z</sup>	●					
2-Hexanone	591-78-6	●		●					
2-Hydroxypropionitrile	78-97-7			●					
Iodomethane (methyl iodide)	74-88-4	(●)		●				●	
Isobutyl alcohol	78-83-1			●					
Isopropylbenzene	98-82-8	●		●		(●)			●
4-Isopropyltoluene	99-87-6	●		●		(●)			●
Limonene	138-86-3			● <sup>z</sup>					
Malonitrile	109-77-3			●					
Methacrylonitrile	126-98-7	(●)		●					
Methanol-OXY	67-56-1			●	(●)				



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Methylacrylate	96-33-3	(●)		●					
Methyl-t-butyl-ether (MTBE)-OXY	1634-04-4	●	● <sup>z</sup>	●	●	● <sup>z</sup>	(● <sup>z</sup> )	● <sup>z</sup>	● <sup>z</sup>
Methylene chloride	75-09-2	●	●	●		●	●	●	●
Methyl methacrylate	80-62-6	(●)		●					
4-Methyl-2-pentanone (MIBK)	108-10-1	●		●					
Naphthalene	91-20-3	●	● <sup>z</sup>	●		(●)			●
Nitrobenzene	98-95-3	● <sup>z</sup>	● <sup>z</sup>	●					
2-Nitropropane	79-46-9	(●)		●					
N-Nitroso-di-n-butylamine	924-16-3			●					
Paraldehyde	123-63-7			●					
Pentachloroethane	76-01-7	(●)		●					
2-Pentanone	107-87-9			●					
2-Picoline	109-06-8			●					
1-Propanol	71-23-8			●					
2-Propanol (isopropyl alcohol)	67-63-0			●					
Propargyl alcohol	107-19-7			●					
B-Propiolactone	57-57-8			●					
Propionitrile (Ethyl cyanide)	107-12-0	(●)		●					
n-Propylamine	107-10-8			●					
n-Propylbenzene	103-65-1	●		●		(●)			●
Pyridine	110-86-1			●					
Styrene	100-42-5	●	● <sup>z</sup>	●		●			●
1,1,1,2-Tetrachloroethane	630-20-6	●		●		(●)		●	●
1,1,2,2-Tetrachloroethane	79-34-5	●	●	●		●	●	●	●
Tetrachloroethene	127-18-4	●	●	●		●	●	●	●
Tetrahydrofuran	109-99-9	(●)		● <sup>z</sup>					
Toluene	108-88-3	●	●	●		●	●	●	●
o-Toluidine (2-methylaniline)	95-53-4			●					
1,2,3-Trichlorobenzene	87-61-6	●		●		(●)			●
1,2,4-Trichlorobenzene	120-82-1	●	● <sup>z</sup>	●		●			●
1,1,1 –Trichloroethane	71-55-6	●	●	●		●	●	●	●
1,1,2-Trichloroethane	79-00-5	●	●	●		●	●	●	●
Trichloroethene	79-01-6	●	●	●		●	●	●	●
Trichlorofluoromethane	75-69-4	●	●	●		●	●	●	●
1,2,3-Trichloropropane	96-18-4	● <sup>x</sup>		●		(●) <sup>x</sup>			●
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	● <sup>z</sup>	● <sup>z</sup>	● <sup>z</sup>		● <sup>z</sup>		● <sup>z</sup>	● <sup>z</sup>
1,2,4-Trimethylbenzene	95-63-6	●		●		(●)			●
1,3,5-Trimethylbenzene	108-67-8	●		●		(●)			●
Vinyl acetate	108-05-4			●					
Vinyl chloride	75-01-4	●	●	●		●	●	●	●
m-Xylene	108-38-3	(●)		(●)		(●)			●
o-Xylene	95-47-6	(●)		(●)		(●)			●
p-Xylene	106-42-3	(●)		(●)		(●)			●
Xylene (total)	1330-20-7	● <sup>z</sup>	● <sup>z</sup>	● <sup>z</sup>		● <sup>z</sup>	(● <sup>z</sup> )	●	● <sup>z</sup>

● (Black print) = Basic Target Analyte, i.e. its name and result will appear on our routine reports.

(●) (Black print) = Basic Target Analyte only if requested. There may be an additional charge.

●<sup>z</sup> = Compound added to formal method target list. For example Xylene (total) is not listed in EPA SW846, method 8260B.

●<sup>x</sup> = Analyte not recommended for analysis by this method when needing to meet required drinking water or effluent detection limits.



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- (Gray print) = Formal method compound that MAI can analyze by special request. There is an extra set-up charge.
- Standard not available
- <sup>O1</sup> Requires separate unpreserved sample containers & separate analysis. Acrylonitrile formally requires this for 8260 but not 524.2.  
For 2-CEVE this is an experiential but not formal method requirement
- <sup>O2</sup> Requires separate SIM mode analysis