

Wiki Website	Chemical Compound:	Boiling	Molecular	Density	Ionization	Solubility	Vapor	Detected By			
		Point	Weight	(g/mL)	(eV)	g/L	kPa	PID*	FID**	XSD	ECD***
https://en.wikipedia.org/wiki/Methane	Methane	-161	16.0	.657 g/L	12.61	0.02		n	y	n	n
https://en.wikipedia.org/wiki/Dichlorodifluoromethane	Freon 12 (Dichlorodifluoromethane)	-29.8	120.9	1.486	12.31	0.3	568.0	n	y	y	LS****
https://en.wikipedia.org/wiki/1,1,2-Trichloro-1,2,2-trifluoroethane	Freon 113 (1,1,2-Trichloro-1,2,2-trifluoroethane)	47.7	187.4	1.564	11.78	0.17	285mm Hg	n	y	y	y
https://en.wikipedia.org/wiki/Vinyl_chloride	Vinyl Chloride (Chloroethene)	-13.0	62.5	0.910	10.00	2.7	2580mm Hg	y	y	y	LS
https://en.wikipedia.org/wiki/Bromomethane	Bromomethane	3.6	94.9	3.974	10.53	17.5	190.0	n	y	y	LS
https://en.wikipedia.org/wiki/Chloroethane	Chloroethane	12.3	64.5	0.901	10.97	5.74	134.6	n	y	y	LS
https://en.wikipedia.org/wiki/Trichlorofluoromethane	Freon 11 (Trichlorofluoromethane)	23.8	137.4	1.494	11.77	1.1	89.0	n	y	y	y
https://en.wikipedia.org/wiki/Acetone	Acetone	56.5	58.1	0.790	9.69	Miscible	30.6	y	y	n	n
https://en.wikipedia.org/wiki/1,1-Dichloroethene	1,1-Dichloroethene	32.0	97.0	1.213	9.65	0.04%		y	y	y	LS
https://en.wikipedia.org/wiki/Dichloromethane	Methylene Chloride (Dichloromethane)	40.0	84.9	1.327	11.35	17.5	57.3	n	y	y	y
https://en.wikipedia.org/wiki/Methyl_tert-butyl_ether	tert butylmethyl ether (MTBE)	55.2	88.2	0.740	9.24	42.0		y	y	n	n
https://en.wikipedia.org/wiki/1,2-Dichloroethene	trans-1,2-Dichloroethene	47.5	97.0	1.260	9.66			y	y	y	LS
https://en.wikipedia.org/wiki/1,1-Dichloroethane	1,1-Dichloroethane	57.2	96.7	1.213	11.06	0.6%	182mm Hg	n	y	y	LS
https://en.wikipedia.org/wiki/1,2-Dichloroethene	cis-1,2-Dichloroethene	60.3	97.0	1.280	9.65			y	y	y	LS
https://en.wikipedia.org/wiki/Butanone	2-butanone (MEK)	80.0	72.1	0.805	9.30	27.5	78mm Hg	y	y	n	n
https://en.wikipedia.org/wiki/1,2-Dichloroethene	1,2-Dichloroethene	60.0	97.0	1.28	9.65			y	y	y	LS
https://en.wikipedia.org/wiki/Chloroform	Chloroform	61.0	119.4	1.480	11.37	8.1	25.9	n	y	y	n
https://en.wikipedia.org/wiki/Tetrahydrofuran	Tetrahydrofuran	66.0	72.1	0.889	9.54	Miscible		y	y	n	n
https://en.wikipedia.org/wiki/Bromochloromethane	Bromochloromethane	68.1	129.4	1.991	10.77	16.7	15.6	n	y	y	n
https://en.wikipedia.org/wiki/Disopropyl_ether	Diisopropyl ether	69.0	102.2	0.725	9.20	2.0	119mm Hg	y	y	n	n
https://en.wikipedia.org/wiki/1,1,1-Trichloroethane	1,1,1-Trichloroethane	74.0	133.4	1.320	11.25	0.4%	100mm Hg	n	y	y	y
https://en.wikipedia.org/wiki/Carbon_tetrachloride	Carbon tetrachloride	76.7	153.8	1.809	11.28	0.8	11.9	n	y	y	y
https://en.wikipedia.org/wiki/Benzene	Benzene	80.1	78.1	0.879	9.25	1.8	12.7	y	y	n	n
https://en.wikipedia.org/wiki/1,2-Dichloroethane	1,2-Dichloroethane	83.7	99.0	1.253	11.04	8.7		n	y	y	LS
https://en.wikipedia.org/wiki/Trichloroethylene	Trichloroethylene	87.0	131.4	1.460	9.45	1.3	58mm Hg	y	y	y	y
https://en.wikipedia.org/wiki/Bromodichloromethane	Bromodichloromethane	90.0	163.8	1.980	10.77	4.5		n	y	y	LS
https://en.wikipedia.org/wiki/1,2-Dichloropropane	1,2-Dichloropropane	96.0	113.0	1.156	10.87	2.6	40mm Hg	n	y	y	y
https://en.wikipedia.org/wiki/Dibromomethane	Dibromomethane	96.9	173.8	2.47	10.49	12.5	4.65	y	y	y	n
https://en.wikipedia.org/wiki/1,4-Dioxane	1,4-Dioxane	101.0	88	1.217	9.20	Miscible	29mm Hg	y	y	n	n
https://en.wikipedia.org/wiki/1,3-Dichloropropene	cis-1,3-Dichloropropene	104.0	111.0	1.217		2.2	34.4mm Hg	y	y	y	LS
https://en.wikipedia.org/wiki/Methyl_isobutyl_ketone	4-methyl-2-pentanone (MIBK)	117.5	100.2	0.800	9.32	19.0	16mm Hg	y	y	n	n
https://en.wikipedia.org/wiki/Toluene	Toluene	110.6	92.1	0.867	8.82	0.5	2.8	y	y	n	n
https://en.wikipedia.org/wiki/1,3-Dichloropropene	trans-1,3-Dichloropropene	112.0	111.0	1.224		2.3	23mm Hg	y	y	y	n
https://en.wikipedia.org/wiki/1,1,2-Trichloroethane	1,1,2-Trichloroethane	115.0	133.4	1.435	11.00	0.4%	19mm Hg	n	y	y	y
https://en.wikipedia.org/wiki/Tetrachloroethylene	Tetrachloroethylene	121.1	165.8	1.622	9.32	0.15	14mm Hg	y	y	y	y
https://en.wikipedia.org/wiki/Dibromochloromethane	Dibromochloromethane	119.5	208.3	2.451	10.59			n	y	y	n
https://en.wikipedia.org/wiki/1,2-Dibromoethane	1,2-Dibromoethane	131.5	187.9	2.170		0.4%	1.6	y	y	y	n
https://en.wikipedia.org/wiki/Chlorobenzene	Chlorobenzene	131.0	112.6	1.110	9.07	0.5	9mm Hg	y	y	y	y
https://en.wikipedia.org/wiki/1,1,2-Tetrachloroethane	1,1,2-Tetrachloroethane	130.5	167.8	1.553	11.62	0.1%	14mm Hg	n	y	y	y
https://en.wikipedia.org/wiki/Ethylbenzene	Ethylbenzene	136.0	106.2	0.860	8.76			y	y	n	n
https://en.wikipedia.org/wiki/M-Xylene	m, p-Xylene	138.5	106.2	0.860	8.50	insoluble	9mm Hg	y	y	n	n
https://en.wikipedia.org/wiki/O-Xylene	o-Xylene	144.4	106.2	0.880	8.56	0.02%	7mm Hg	y	y	n	n
https://en.wikipedia.org/wiki/Styrene	Styrene	145.0	104.2	0.910	8.47	0.03%	5mm Hg	y	y	n	n
https://en.wikipedia.org/wiki/1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	146.5	167.9	1.250	11.10	2.9	5mm Hg	n	y	y	y
https://en.wikipedia.org/wiki/Bromoform	Bromoform	149.0	252.7	1.590	10.48	3.2	670Pa	y	y	LS	n

Wiki Website	Chemical Compound:	Boiling	Molecular	Density	Ionization	Solubility	Vapor		Analytes		
		Point	Weight	Potential	in Water	Pressure	Detected By				
		(°C)	(g/mol)	(g/mL)	(eV)	g/L	kPa	PID*	FID**	XSD	ECD***
https://en.wikipedia.org/wiki/Cumene	Isopropyl benzene (Cumene)	152.0	120.2	0.862	8.75	Negligible	8mm Hg @ ~25C	y	y	n	n
https://en.wikipedia.org/wiki/Bromobenzene	Bromobenzene	156.0	157.0	1.500	8.98	0.41	4.18mm Hg	y	y	LS	n
https://en.wikipedia.org/wiki/Chlorotoluene	Chlorotoluene	162.0	126.6	1.072	8.83	Insoluble		y	y	y	n
https://en.wikipedia.org/wiki/Mesitylene	1,3,5-Trimethylbenzene	164.7	120.2	0.864	8.39	0.002%	2mm Hg	y	y	n	n
https://en.wikipedia.org/wiki/1,2,4-Trimethylbenzene	1,2,4-Trimethylbenzene	170.0	120.2	0.876	8.27			y	y	n	n
https://en.wikipedia.org/wiki/1,3-Dichlorobenzene	1,3-Dichlorobenzene	173.0	147.0	1.250	9.12	Insoluble		y	y	y	LS
https://en.wikipedia.org/wiki/1,4-Dichlorobenzene	1,4-Dichlorobenzene	174.0	147.0	1.300	8.94	0.11	1.3mm Hg	y	y	y	LS
https://en.wikipedia.org/wiki/1,2-Dichlorobenzene	1,2-Dichlorobenzene	180.5	147.0	1.460	9.07	0.01%	1mm Hg	y	y	y	LS
https://en.wikipedia.org/wiki/1,2,4-Trichlorobenzene	1,2,4-Trichlorobenzene	214.4	181.4	1.460		0.003%	1mm Hg	y	y	y	y
https://en.wikipedia.org/wiki/1,3,5-Trichlorobenzene	1,3,5-Trichlorobenzene	208.0	181.4	1.140		6.0		y	y	y	y
https://en.wikipedia.org/wiki/Naphthalene	Naphthalene	218.0	128.2		8.10	0.03	23.6Pa	y	y	n	n
https://en.wikipedia.org/wiki/Total_petroleum_hydrocarbon	Gasoline Range Organics (C6-C10)	60-220	Variable	Variable	Variable	Variable	Variable	y	y	n	n
https://en.wikipedia.org/wiki/Total_petroleum_hydrocarbon	Diesel Range Organics (C10-C28)	170-430	Variable	Variable	Variable	Variable	Variable	y	y	n	n
		*Most common PID lamp electron voltage = 10.6eV. To respond on the PID, the analytes ionization potential must be below the lamp electron voltage.									
		**All compounds contain carbon and will burn in the FID if in high enough concentration									
		***An ECD response is variable depending upon the number of chlorine atoms on a molecule and molecular structure.									
		**** LS = Low Sensitivity									
		Miscible is a property of two substances to mix in all proportions.									
		As the analyte boiling point increases the more difficult it is for the compounds to diffuse through the membrane. This will increase the amount of carryover depending upon the MIP trip time that is used in the software. The analytes with the darker the color on this list essentially will not respond at the MIP detector: due to their high boiling points. Only the lightest portion of the diesel range organics will make it through the membrane and reach the detectors however the higher boiling point compounds will cause high amounts of carryover.									
		Cannot be detected by MIP - These analytes are too large of molecules and/or have too high of a boiling points									
https://en.wikipedia.org/wiki/Polychlorinated_biphenyl	Polychlorinated biphenyl (PCBs)	340-375	291-361	1.18-1.57				n	n	n	n
https://en.wikipedia.org/wiki/Perfluorooctanesulfonic_acid	Perfluorooctanesulfonic acid (PFOS)	133	500					n	n	n	n
https://en.wikipedia.org/wiki/Perfluorooctanoic_acid	Perfluorooctanoic acid (PFOA)	190	414	1.8		9.5		n	n	n	n