

Wiki Website	Chemical Compound:	Boiling Point (°C)	Molecular Weight (g/mol)	Density (g/mL)	Ionization Potential (eV)	Solubility in Water (g/L)	Vapor Pressure (kPa) @ ~25C	Analytes Detected By			
								PID*	FID**	XSD	ECD***
https://en.wikipedia.org/wiki/Cumene	Isopropyl benzene (Cumene)	152.0	120.2	0.862	8.75	Negligible	8mm Hg	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