

Selected chemical compounds detectable by IMS

Compound	<u>T_{monomer}</u> T _{RIP}	<u>T_{Dimer}</u> T _{RIP}	Other peaks	MDC, (ppb)	Ionization
Alcohols					
Butanol	1.19	1.41	1.68	10	β(+)
Cresol	1.14			10	β(+)
Cyclohexanol	1.28	1.35	1058	10	β(+)
Ethanol	1.06	1.15		10	β(+)
Heptanol	1.42	1.81		10	β(+)
Methanol	0.97	1.03		20	β(+)
Tetrahydrofurfury alcohol	1.16	1.43		10	β(+)
Alcanes					
Cyclohexane	1.04	1.09	1.13	50	β(+)
Heptane	1.12			50	β(+)
Isooctane	1.03	1.11	1.16	50	β(+)
Nonane	1.55			50	β(+)
Aldehydes					
Butylaldehyde	1.13	1.22	1.30	10	β(+)
Formaldehyde	0.99			10	β(+)
Heptylaldehyde	1.35	1.72		10	β(+)
Propionaldehyde	1.04	1.16	1.33	10	β(+)
Amines					
Amphetamine	1.13	1.67		1	β(+)
Diaminobutane	1.1	1.30		10	β(+)
Diaminobutane	1.34	1.75		10	β(-)
Diaminopropane	1.26			10	β(+)
Diaminopropane	1.34	1.75	0.93	10	β(-)
Dimethylformamide	1.04	1.26		1	β(+)
1,1-Dimethylhydrazine	1.24			1	β(+)
Dimethylurea	0.91	0.94	1.10	1	β(+)
Hexamethylenetetramine	0.96	1.17		10	β(+)
Hexylamine	1.21	1.60	0.92	1	β(+)
Hydrazine	1.04	1.14		10	β(-)
Methylhydrazine	1.24			1	β(-)
Methylhydrazine	0.85	0.92	1.05	1	β(+)
Nicotine	1.38	2.12		2	β(+)
Nonafluorobutylamine	1.44			1	β(-)

Compound	T_{monomer} T_{RIP}	T_{Dimer} T_{RIP}	Other peaks	MDC, (ppb)	Ionization
Aromates					
Chlorophenol	1.33	1.69		10	$\beta(-)$
Dimethoxybenzene	1.16	1.29	1.61	10	$\beta(+)$
Ethylbenzene	1.20	1.60		5	$\beta(+)$
Iodobenzene	0.95			10	$\beta(-)$
Nitrobenzene	1.26	1.55		10	$\beta(-)$
Phenol	1.27			10	$\beta(-)$
Carbon acids					
Acetic acid	1.06	1.17		10	$\beta(+)\beta(-)$
Formic acid	1.13	1.20			$\beta(-)$
Pyridines					
Pyridine	1.02	1.27		10	$\beta(+)$
2-Dimethylpyridine	1.67	1.40		10	$\beta(+)$
Esters					
Ammonium acetate	0.85	0.91	0.95	1	$\beta(+)$
Ethylacetate	1.11	1.36		1	$\beta(+)$
Ethylacetoacetate	1.18	1.39	1.62	1	$\beta(+)$
Phthalic acid diethylester	1.05	1.15		1	$\beta(+)$
Phthalic acid dibutylester	1.19	1.40		1	$\beta(+)$
Phthalic acid dioctylester	1.11	1.28	1.36	1	$\beta(+)$
Ethers					
Diethylether	1.08	1.25		1	$\beta(+)$
Divinylether	1.20	1.69	1.75	1	$\beta(+)$
Halogenated Hydrocarbons					
Amylchloride	0.91	0.98	1.04		$\beta(-)$
Amylchloride	1.29	1.75			$\beta(+)$
Chlorobromomethane	0.93	1.03	1.50		$\beta(-)$
Chloroacetonitrile	0.91	0.98	1.14		$\beta(-)$
Chlorotrimethyl silane	1.21	1.36			$\beta(-)$
Chlorodimethylether	0.82			5	$\beta(-)$
Dichlorethane	0.91	0.98		5	$\beta(-)$
Dibromomethane	0.93	0.96	1.05		$\beta(-)$
Dibromobutane	0.93	0.96	1.05		$\beta(-)$
Dibromomethane	0.93	0.96	1.05		$\beta(-)$

Compound	<u>T_{monomer}</u>	<u>T_{Dimer}</u>	Other peaks	MDC, (ppb)	Ionization
	T _{RIP}	T _{RIP}			
Dibromopropane	0.93	0.96	1.05		β(-)
Isobutylchloride	0.91	0.96	1.34		β(-)
n-Butylchloride	0.91	0.98	1.04		β(-)
Methylchloride	0.82			1000	β(-)
Trichloroethylene	0.93	0.96	1.44		β(-)
Trichlorofluoromethane	0.97	1.03			β(-)
Ketones					
Acetone	1.12			1	β(+)
Acetophenone	1.20	1.58		1	β(+)
Acetylacetone	1.12	1.44	1.46		β(+)
Acetylacetone	1.05	1.26			β(-)
Benzophenone	1.36	1.95			β(+)
Cumene	1.15	1.17			UV, β(+)
Ethylmethylketone	1.07	1.27		1	β(+)
Hexanone	1.21	1.53			β(+)
Phosphoroganic Compounds					
Malathion	1.13	1.37			β(+)
Tributylphosphite	1.19	1.41	1.56	1	β(+)
Tricresylphosphate	1.69	2.49		3	β(+)
Others					
Acroline	1.13				β(+)
Ammonia	0.90	0.85		1	β(+)
Dibutylsulfite	1.32	1.84			β(+)
Carbon disulfide	0.96			5	β(-)
Chlorine	0.95			10	β(+)
Diborane	0.94			1	β(-)
Ethylenoxide	1.04	1.25		100	β(+)
Hydrochloric acid	0.91			25	β(-)
Hydrocyanic acid	0.92			5	β(-)
Hydrogen sulfide	0.93			10	β(-)
Nitric oxide	0.95			50	β(-)
Nitrogen dioxide	0.90			5	β(-)
Phosgene low	0.87	0.96		0.5	β(-)
High				100	
Phosphine	n/a			n/a	n/a

Compound	$\frac{T_{\text{monomer}}}{T_{\text{RIP}}}$	$\frac{T_{\text{Dimer}}}{T_{\text{RIP}}}$	Other peaks	MDC, (ppb)	Ionization
Sulfur dioxide	1.04			10	$\beta(-)$
Sulfur hexafluoride	1.13			10	$\beta(+)$
Tert-Dibutylmalonate	1.04	1.27			$\beta(+)$

Selected chemical compounds by PID

Compound	CAS-No.	Formula	IP (eV)	CF
Paraffins and Cycloparaffins				
Isobutane, (I-Butane)	75-28-5	C ₂ H ₁₀	10.57	200
Pentance, (n-Pentance)	109-66-0	C ₅ H ₁₂	10.37	16.8
Butane, 2-methyl- (Iso-pentane)	78-78-4	C ₅ H ₁₂	10.21	#NV
Propane, 2,2-dimethyl	463-82-1	C ₅ H ₁₂	10.35	#NV
Hexane, (n-Hexane)	110-54-3	C ₆ H ₁₄	10.18	8.6
Pentane, 2-methyl	107-83-5	C ₆ H ₁₄	10.12	#NV
Pentane, 3-methyl	96-14-0	C ₆ H ₁₄	10.08	#NV
Butane, 2,2-dimethyl-	75-83-2	C ₆ H ₁₄	10.06	#NV
Butane, 2,3-dimethyl-	79-29-8	C ₆ H ₁₄	10.02	#NV
Heptane, (n-Heptane)	142-82-5	C ₇ H ₁₆	9.90	#NV
Pentane, 2,2,4-trimethyl	540-84-1	C ₈ H ₁₈	9.86	2.8
Cyclopropane	75-19-4	C ₃ H ₆	9.90	#NV
Cyclopentane	287-92-3	C ₅ H ₁₀	10.35	#NV
Cyclohexane	110-82-7	C ₆ H ₁₂	9.80	2.8
Cyclohexane, methyl-	108-87-2	C ₇ H ₁₄	9.85	V.2
Alkyl halides				
Butane, 2-chlorobutane	78-86-4	C ₄ H ₉ Cl	10.53	#NV
Bromine	7726-95-6	Br ₂	10.51	#NV
Methyl bromide	74-83-9	CH ₃ Br	10.54	3.4
Methane, dibromo-	74-95-3	CH ₂ Br ₂	10.24	#NV
Methane, tribromo-	75-25-2	CHBr ₃	10.48	5
CHBr=CH	101150-96-3	CH ₂ BrCl	10.59	#NV
Methane, dibromochloro-	124-48-1	CHBr ₂ Cl	10.59	#NV
Ethyl bromide	74-96-4	C ₂ H ₄ Br	10.29	#NV
1,1-dibromoethane	557-91-5	C ₂ H ₄ Br ₂	10.19	#NV
Propane, 1-bromo-	106-94-5	C ₃ H ₇ Br	10.20	#NV
Propane, 2-bromo-	75-26-3	C ₃ H ₇ Br	10.07	#NV
Propane, 1,3-dibromo-	109-64-8	C ₃ H ₆ Br ₂	10.07	#NV
Butane, 1-bromo-	109-65-9	C ₄ H ₉ Br	10.13	#NV
Propane, 1-bromo-2-methyl-	78-77-3	C ₄ H ₉ Br	10.09	#NV
Propane, 2-bromo-2-methyl-	507-19-7	C ₄ H ₉ Br	9.89	#NV
Pentane, 1-bromo-	110-53-2	C ₅ H ₁₁ Br	10.10	#NV
Hydrogen iodide	10034-85-2	HI	10.38	#NV

Compound	CAS-No.	Formula	IP (eV)	CF
Iodine	7553-56-2	I ₂	9.307	0.2
Methyl iodide	74-88-4	CH ₃ I	9.53	#NV
Methane, diiodo-	75-11-6	CH ₂ I ₂	9.46	#NV
Iodoethane	75-03-6	C ₂ H ₅ I	9.33	#NV
Propane, 1-iodo-	107-08-4	C ₃ H ₇ I	9.26	#NV
Propane, 2-iodo-	75-30-9	C ₃ H ₇ I	9.18	#NV
Butane, 1-iodo-	542-69-8	C ₄ H ₉ I	9.21	#NV
Butane, 2-iodo-	513-48-4	C ₄ H ₉ I	9.10	#NV
Propane, 1-iodo-2-methyl-	513-38-2	C ₄ H ₉ I	9.18	#NV
Propane, 2-iodo-2-methyl (tert-butyl iodide)	558-17-8	C ₄ H ₉ I	9.02	#NV
Pentane, 1-iodo-	628-17-1	C ₅ H ₁₁ I	9.19	#NV
1,1,1,-Trifluoro-2-iodoethane	353-83-3	C ₂ H ₂ F ₃ I	10.00	#NV
1,1,1,2,2,3,3,-Heptafluoro-3-iodopropane	754-34-7	C ₃ H ₇ I	10.36	#NV
1,1,1,2,2,3,3,-Heptafluoro-4-iodobutane	374-98-1	C ₄ H ₂ F ₇ I	9.96	#NV
Aliphatic alcohols, ethers, thiol and sulfides				
Ethanol (ethyl alcohol)	64-17-5	C ₂ H ₆ O	10.49	24
1-Propanol (n-propyl alcohol)	71-23-8	C ₂ H ₈ O	10.22	12
1-Butanol (n-butyl alcohol)	71-36-3	C ₄ H ₁₀ O	10.04	9.4
1-Propanol, 2-methyl- (isobutyl alcohol)	78-83-1	C ₄ H ₁₀ O	10.02	#NV
2-Butanol	78-92-2	C ₄ H ₁₀ O	9.88	#NV
Ethanol, 1,1-dimethyl-	75-65-0	C ₄ H ₁₀ O	9.90	#NV
Ethoxy ethan, (ethyl ester)	60-29-7	C ₄ H ₁₀ O	9.60	2.2
Methyl propyl ether	557-17-5	C ₄ H ₁₀ O	9.41	#NV
Dimethyl ether	115-10-6	C ₂ H ₆ O	10.00	#NV
Di-n-propyl ether	111-43-3	C ₆ H ₁₄ O	9.27	#NV
Hydrogen sulfide	7783-06-4	H ₂ S	10.461	#NV
Methyl mercaptan	74-93-1	CH ₄ S	9.446	1.2
Ethyl mercaptan	75-08-1	C ₂ H ₆ S	9.28	1.2
n-Propyl mercaptan	107-03-9	C ₃ H ₈ S	9.195	#NV
n-Butyl mercaptan	109-79-5	C ₄ H ₁₀ S	9.14	1.0
Dimethyl sulfide	75-18-3	C ₂ H ₆ S	8.69	#NV
Ethane, (methylthiol)-, (Ethyl methyl sulfide)	924-89-5	C ₃ H ₈ S	8.55	#NV
Diethyl sulfide	352-93-2	C ₄ H ₁₀ S	8.42	1.0
Propane, 1,1'-thiobis- (di-n-propyl sulfide)	111-47-7	C ₆ H ₁₄ S	8.30	#NV

Compound	CAS-No.	Formula	IP (eV)	CF
Aliphatic aldehydes and Ketones				
Acetaldehyde	75-07-0	C ₂ H ₄ O	10.22	11
Propanol	123-35-6	C ₃ H ₆ O	9.96	3.8
Butanal	123-72-8	C ₄ H ₈ O	9.83	#NV
Propanal	78-84-2	C ₄ H ₈ O	9.72	#NV
Pentanal	110-62-3	C ₅ H ₁₀ O	9.82	#NV
Butanal, 3-methyl-	590-86-3	C ₅ H ₁₀ O	9.71	#NV
2-Propenal (Acrolein)	107-02-8	C ₃ H ₄ O	10.10	7.8
Crotonaldehyde	123-73-9	C ₄ H ₆ O	9.73	2.2
Benzaldehyde	10-52-7	C ₇ H ₆ O	9.49	#NV
Acetone	67-64-1	C ₃ H ₆ O	9.70	2.2
2-Butanone (Methyl ethyl ketone)	78-93-3	C ₄ H ₈ O	9.52	1.8
2-Pentanone	107-87-9	C ₅ H ₁₀ O	9.37	1.8
3-Pentanone	96-22-0	C ₅ H ₁₀ O	9.31	#NV
2-Hexanone	591-78-6	C ₆ H ₁₂ O	9.37	#NV
Methyl i-buty ketone	108-10-1	C ₆ H ₁₀ O	9.30	2.4
Butanone, 3,3-dimethyl-	75-97-8	C ₆ H ₁₂ O	9.17	#NV
Cyclohexanone	108-94-1	C ₆ H ₁₀ O	9.14	1.8
2,3-Butanedione	431-03-9	C ₄ H ₆ O ₂	9.30	#NV
Acetylacetone	123-54-6	C ₅ H ₈ O ₂	8.82	#NV
Aliphatic Acids and esters				
Acetic acid	94-19-7	C ₄ H ₄ O ₂	10.37	44
Propanoic acid	79-09-4	C ₃ H ₆ O ₂	10.51	#NV
Butanoic acid	107-92-6	C ₄ H ₈ O ₂	10.16	#NV
Propanoic acid, 2-methyl-	79-31-2	C ₄ H ₈ O ₂	10.329	#NV
Pentanoic acid	109-52-4	C ₅ H ₁₀ O ₂	10.53	#NV
Formic acid, propyl ester	110-74-7	C ₄ H ₈ O ₂	10.54	#NV
Formic acid, butyl ester	592-84-7	C ₅ H ₈ O ₂	10.50	#NV
2-Methylpropyl formate	542-55-2	C ₅ H ₁₀ O ₂	10.46	#NV
Acetic acid, methyl ester	79-20-9	C ₃ H ₆ O ₂	10.25	#NV
Ethyl acetate	141-78-6	C ₄ H ₈ O ₂	10.11	9.2
n-Propyl acetate	109-60-4	C ₅ H ₁₀ O ₂	10.04	7
Acetic acid, 1-methylethyl ester	108-21-4	C ₅ H ₁₀ O ₂	9.99	5
Acetic acid, butyl ester	123-86-4	C ₆ H ₁₂ O ₂	10.01	5.2
Isobutyl acid	110-19-0	C ₆ H ₁₂ O ₂	9.97	#NV

Compound	CAS-No.	Formula	IP (eV)	CF
Acetic acid, 1-methylpropyl ester,	105-46-4	C ₆ H ₁₂ O ₂	9.91	#NV
Propanoic acid, methyl ester,	664-12-1	C ₄ H ₈ O ₂	10.15	#NV
Propanoic acid, ethyl ester,	105-37-3	C ₅ H ₁₀ O ₂	10.00	#NV
Butanoic acid, methyl ester,	623-42-7	C ₅ H ₁₀ O ₂	10.07	#NV
Propanoic acid, 2-methyl-, methyl ester	547-63-7	C ₅ H ₁₀ O ₂	9.98	#NV
Aliphatic amines and amides				
Ammonia	7664-41-7	H ₃ N	10.02	19.4
Methylamine	74-89-5	CH ₅ N	8.9	2
Ethylamine	75-04-7	C ₂ H ₇ N	8.86	1.6
1-Propanamine	107-10-8	C ₃ H ₉ N	8.78	#NV
i-propyl amine			8.72	#NV
1-Butanamine	109-73-9	C ₄ H ₁₁ N	8.71	14
1-Propanamine	78-81-9	C ₄ H ₁₁ N	8.70	#NV
2-butyl amine			8.70	#NV
2-Propanamine, 2-methyl-(tbutyl amine)	75-64-9	C ₄ H ₁₁ N	8.64	#NV
Methanamine, N-methyl-(Dimethylamine)	124-40-3	C ₂ H ₇ N	8.24	3
Ethanamine, N-methyl-(Diethylamine)	109-89-7	C ₄ H ₁₁ N	8.01	2
1-Propanamine, n-propyl-(Di-n-propylamine)	142-84-7	C ₆ H ₁₅ N	7.84	#NV
Di-i-propyl amine			7.73	#NV
1-Butanamine, N-butyl-(Di-n-butylamine)	111-92-2	C ₈ H ₁₉ N	7.69	#NV
Trimethylamine	75-503	C ₃ H ₉ N	7.95	1.8
Triethylamine	121-44-8	C ₆ H ₁₅ N	7.50	2.6
1-Propanamine, N,N-dipropyl-(Tri-n-propylamine)	102-69-2	C ₉ H ₂₁ N	7.23	#NV
Formamide	75-12-7	CH ₃ NO	10.25	#NV
Acetamide	60-35-5	C ₂ H ₅ NO	9.77	#NV
N-methyl acetamide	79-16-3	C ₃ H ₇ NO	8.90	#NV
N,N-dimethyl formamide	68-12-2	C ₃ H ₇ NO	9.12	1.6
N,N-dimethyl acetamide	127-19-5	C ₄ H ₉ NO	8.81	#NV
N,N-diethyl formamide	617-84-5	C ₅ H ₁₁ NO	8.89	#NV
N,N-diethyl acetamide	685-91-5	C ₆ H ₁₃ NO	8.60	#NV
Other Aliphatic molecules with N atoms				
3-butene-nitrile	109-75-1	C ₄ H ₅ N	10.39	#NV
Methyl thiocyanate	556-64-9	C ₂ H ₃ NS	10.07	#NV
Ethyl thiocyanate	542-90-5	C ₃ H ₅ NS	9.89	#NV

Compound	CAS-No.	Formula	IP (eV)	CF
Methyl isothiocyanate	556-61-6	C ₂ H ₃ NS	9.25	#NV
Ethyl isothiocyanate	542-85-8	C ₃ H ₅ NS	9.14	#NV
Olefin derivatives				
Vinyl chloride	75-01-4	C ₂ H ₃ Cl	9.99	4
Ethene, 1,2-dichloro- (Z)	156-59-2	C ₂ H ₂ Cl ₂	9.65	#NV
Ethene, 1,2-dichloro- (E)	156-60-5	C ₂ H ₂ Cl ₂	9.66	#NV
Trichloroethylene	79-01-6	C ₂ HCl ₃	9.45	1
Tetrachloroethylene	127-18-4	C ₂ Cl ₄	9.32	1.4
Vinyl bromide	593-60-2	C ₂ H ₃ Br	9.82	0.8
Ethene, 1,2-dibromo-	540-49-8	C ₂ H ₂ Br ₂	9.45	#NV
Ethene, 1,2-dibromo-, (Z)	590-11-4	C ₂ H ₂ Br ₂	9.45	#NV
Ethene, 1,2-dibromo-, (E)	590-12-5	C ₂ H ₂ Br ₂	9.46	#NV
Tribromoethylene	598-16-3	C ₂ HBr ₃	9.27	#NV
3-chloropropene	107-05-1	C ₃ H ₅ Cl	10.05	8.6
2,3-dichloropropene	78-88-6	C ₃ H ₄ Cl ₂	9.82	2.6
1-bromopropene	590-14-7	C ₃ H ₅ Br	9.30	#NV
3-bromopropene	106-95-6	C ₃ H ₅ Br	9.6	#NV
Trans-2,3-dichloro-1,1,1,4,4,4,-hexafluoro-2-butene	303-04-8	C ₄ Cl ₂ F ₆	10.36	#NV
2-Propenal (Acroline)	107-02-8	C ₃ H ₄ O	10.10	7.8
Crotonaldehyde	123-73-9	C ₄ H ₆ O	9.73	2.2
2-Butenal	4170-30-3	C ₄ H ₆ O	9.73	#NV
3-penten-2-one, 4-methyl (Mesityl oxide)	141-79-7	C ₆ H ₁₀ O	9.08	#NV
Ethen, methoxy- (Vinyl methyl ether)	107-25-5	C ₃ H ₆ O	8.93	#NV
2-propen-1-ol (Allyl alcohol)	107-18-6	C ₃ H ₆ O	9.67	4.8
Acetic acid ethenyl ester (Vinyl acetate)	108-05-4	C ₄ H ₆ O ₂	9.19	2.4
Heterocyclic compounds				
Furan	110-00-9	C ₄ H ₆ O	8.89	#NV
Furan, 2-methyl-	534-22-5	C ₅ H ₆ O	8.39	#NV
2-furancarboxaldehyde	98-01-1	C ₅ H ₄ O ₂	9.21	1.8
Furan, tetahydro-	109-99-9	C ₆ H ₈ O	9.54	3.4
2H-pyran,3,3-hihydro- (Dihdropyran)	110-87-2	C ₅ H ₈ O	8.34	#NV
2H-pyran, tetrahydro- (tetrahydropyran)	142-68-7	C ₅ H ₁₀ O	9.26	#NV
Thiophene	110-02-1	C ₄ H ₄ S	8.86	#NV
Thiophen, 2-chloro	96-43-5	C ₄ H ₃ ClS	8.68	#NV
Thiophene, 2-bromo	1003-09-4	C ₄ H ₃ BrS	8.63	#NV

Compound	CAS-No.	Formula	IP (eV)	CF
Pyrrole	109-97-7	C ₄ H ₅ N	8.207	#NV
Pyridine	110-86-1	C ₅ H ₅ N	9.26	1.4
Pyridine, 2-methyl- (2-picoline)	109-06-8	C ₆ H ₇ N	9.02	#NV
Pyridone, 3-methyl- (3-picoline)	108-99-6	C ₆ H ₇ N	9.04	1.8
Pyridine, 4-methyl- (4-picoline)	108-89-4	C ₆ H ₇ N	9.04	#NV
Pyridine, 2,3-dimethyl- (2,3-lutidine)	583-61-9	C ₇ H ₉ N	8.85	#NV
Pyridine, 2,4-dimethyl- (2,4-lutidine)	108-47-4	C ₇ H ₉ N	8.85	#NV
Pyridine, 2,6-dimethyl- (2,6-lutidine)	108-48-5	C ₇ H ₉ N	8.85	#NV
Tribromoethene	598-16-3	C ₂ HBr ₃	9.27	#NV
Aromatic compounds				
Benzene	71-43-2	C ₆ H ₆	9.24	1
Toluene	108-88-3	C ₇ H ₈	8.82	1
Ethylbenzene	100-41-4	C ₈ H ₁₀	8.75	1
Benzene, propyl- (n-propyl benzene)	103-65-1	C ₉ H ₁₂	8.72	#NV
Benzene, (1-methylethyl)-	98-82-8	C ₉ H ₁₂	8.69	1
Benzene, butyl- (n-butyl benzene)	104-51-8	C ₁₀ H ₁₄	8.69	#NV
Benzene, (1-methylpropyl)- (s-butyl benzene)	134-98-8	C ₁₀ H ₁₄	8.68	#NV
Benzene, tert-butyl-	98-06-6	C ₁₀ H ₁₄	8.69	#NV
Benzene, 1,2-dimethyl- (o-xylene)	95-47-6	C ₈ H ₁₀	8.555	1.2
Benzene, 1,3-dimethyl- (m-xylene)	108-38-3	C ₈ H ₁₀	8.55	0.8
Benzene, 1,4-dimethyl- (p-xylene)	106-42-3	C ₈ H ₁₀	8.445	1
Benzene, 1,3,5-treimethyl-	108-93-2	C ₉ H ₁₂	8.40	0.7
Benzene, 1,2,4,5-teterametyl- (Durene)	95-93-2	C ₁₀ H ₁₄	8.025	#NV
Styrene	100-42-5	C ₈ H ₈	8.43	0.8
Benzene, 1-ethenyl-2-methyl- (o-methyl styrene)	611-15-4	C ₉ H ₁₀	8.35	#NV
Ethynylbenzene	536-74-3	C ₈ H ₆	8.815	#NV
Naphthalene	91-20-3	C ₁₀ H ₈	8.12	#NV
1-methylnaphthalene	90-12-0	C ₁₁ H ₁₀	7.69	#NV
2-methylnaphthalene	91-57-6	C ₁₁ H ₁₀	7.955	#NV
Biphenyl	92-52-4	C ₁₂ H ₁₀	8.27	#NV
Phenol	108-95-2	C ₆ H ₆ O	8.508	2
Benzene, methoxy- (Anisole)	100-66-3	C ₇ H ₈ O	8.25	1.6
Benzene, ethoxy- (Phenetole)	103-73-1	C ₈ H ₁₀ O	8.13	#NV
Benzaldehyde	100-52-7	C ₇ H ₆ O	9.49	#NV
Acetophenone	98-86-2	C ₈ H ₈ O	9.28	#NV

Compound	CAS-No.	Formula	IP (eV)	CF
Benzenethiol	108-98-5	C ₆ H ₆ S	8.32	#NV
Benzene, isocyanato-	103-71-9	C ₇ H ₅ NO	8.77	#NV
Benzene, isothiocyanato-	103-72-0	C ₇ H ₅ NS	8.520	#NV
Benzonitrile	100-47-0	C ₇ H ₅ N	9.71	3.2
Benzene, nitro-	98-95-3	C ₆ H ₅ NO ₂	9.87	3.8
Aniline	62-53-3	C ₆ H ₇ N	7.720	1
Benzene, fluoro-	462-06-6	C ₆ H ₅ F	9.182	#NV
Benzene, chloro-	108-90-7	C ₆ H ₅ Cl	9.08	0.8
Benzene, bromo-	108-86-1	C ₆ H ₅ Br	9.03	1.2
Benzene, iodo-	591-50-4	C ₆ H ₅ I	8.73	#NV
Benzene, 1,2-dichloro- (o-dichlorobenzene)	95-50-1	C ₆ H ₄ Cl ₂	9.07	0.94
Benzene, 1,3-dichloro- (m-dichlorobenzene)	541-73-1	C ₆ H ₄ Cl ₂	9.12	#NV
Benzene, 1,4-dichloro- (p-dichlorobenzene)	106-46-7	C ₆ H ₄ Cl ₂	8.94	#NV
Benzene, 1-chloro-2-fluoro- (1-chloro-2-fluorobenzene)	348-51-6	C ₆ H ₄ ClF	9.16	#NV
Miscellaneous compounds				
Propylene oxide	75-56-9	C ₃ H ₆ O	10.22	13
1,4-dioxane	123-91-1	C ₄ H ₈ O ₂	9.13	2.2
Methane, dimethoxy-	109-87-5	C ₃ H ₈ O ₂	10.0	#NV
Diethoxyethane			9.70	#NV
1,1-dimethoxyethane	534-15-6	C ₄ H ₁₀ O ₂	10	#NV
B-Propiolactone	57-57-8	C ₃ H ₄ O ₂	9.70	#NV
Disulfide, dimethyl- (Methyl disulfide)	624-92-0	C ₂ H ₆ S ₂	8.18	0.4
Disulfide, diethyl (Ethyl disulfide)	110-81-6	C ₄ H ₁₀ S ₂	8.27	#NV
Sulfurous acid, diethyl ester (Diethyl sulfite)	623-81-4	C ₄ H ₁₀ O ₃ S	9.68	#NV
Ethanethiocis acid (Thiolacetic acid)	507-09-5	C ₂ H ₄ OS	10.06	#NV
Acetyl bromide	506-96-7	C ₂ H ₃ BrO	10.24	#NV
Trifluoromethylcyclohexane	401-75-2	C ₇ H ₁₁ F ₃	10.46	#NV
1,3-Dutadiene, 2-methyl- (Isoprene)	78-79-5	C ₅ H ₈	8.845	1.2

Correction Factors

All correction factors are relative to Benzene (CF=1, CF<1 means higher sensitivity, CF>1 means lower sensitivity,) where the response is 1, the given values correspond for a 10.6 eV lamp.