

GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
A Acetaldehyde	C ₂ H ₄ O	75-07-0	10.23	2	3.4	ZR
Acetamide	C ₂ H ₅ NO	60-35-5	9.69	NA	2	NA
Acetic acid	C ₂ H ₄ O ₂	64-17-7	10.66	4	36.2	ZR
Acetic anhydride	C ₄ H ₆ O ₃	108-24-7	10.14	2	4.0	NA
Acetoin	C ₄ H ₈ O ₂	513-86-0	~9.8	NA	1	NA
Acetone	C ₃ H ₆ O	67-64-1	9.69	1.7	0.7	1.2
Acetone cyanohydrin	C ₄ H ₇ NO	75-86-5	11.09	1	ZR	ZR
Acetophenone	C ₈ H ₈ O	98-86-2	9.29	NA	0.6	NA
Acetyl bromide	C ₂ H ₃ BrO	506-96-7	10.24	1.5	3	ZR
Acetylene	C ₂ H ₂	74-86-2	11.4	2	ZR	ZR
Acetylglycine, N-	C ₄ H ₇ N ₂ O ₃	543-24-8	9.4	NA	2	NA
Acrolein	C ₃ H ₄ O	107-02-8	10.22	1.2	3.2	NA
Acrylic Acid	C ₃ H ₄ O ₂	79-10-7	10.6	3	2.7	ZR
Acrylonitrile	C ₃ H ₃ N	107-13-1	10.91	1.6	ZR	ZR
Alkanes, n-, C ₆ +	C _n H _{2n+2}	N/A	~10	NA	1	NA
Allyl acetoacetate	C ₇ H ₁₀ O ₃	1118-84-9	~10	NA	1.5	ZR
Allyl alcohol	C ₃ H ₆ O	107-18-6	9.63	1.1	2.1	4
Allyl bromide	C ₃ H ₅ Br	106-95-6	~10	NA	3.0	NA
Allyl chloride	C ₃ H ₅ Cl	107-05-1	10.05	0.7	4.5	NA
Allyl glycidyl ether	C ₆ H ₁₀ O ₂	106-92-3	~10	NA	0.8	NA
Allyl propyl disulfide	C ₆ H ₁₂ S ₂	2179-59-1	~8.5	NA	0.4	NA
Ammonia	NH ₃	7664-41-7	10.18	5.7	8.5	NA
Amyl acetate	C ₇ H ₁₄ O ₂	628-63-7	9.9	0.64	1.8	9
Amyl alcohol	C ₅ H ₁₂ O	71-41-0	10	0.75	3.5	10
Amyl alcohol, tert-	C ₅ H ₁₂ O	75-85-4	9.8	1.01	1.5	2.8
Anethole	C ₁₀ H ₁₂ O	104-46-1	~9	NA	0.4	NA
Aniline	C ₆ H ₇ N	62-53-3	7.7	NA	0.48	0.8
Anisole	C ₇ H ₈ O	100-66-3	8.21	0.57	0.5	0.59
Anisyl aldehyde	C ₈ H ₈ O ₂	123-11-5	~9	NA	0.4	NA
Arsine	AsH ₃	7784-42-1	9.89	-	2.5	-
Asphalt, petroleum fumes	-	8052-42-4	~9	NA	1.0	NA
B Benzaldehyde	C ₇ H ₆ O	100-52-7	9.49	0.9	0.9	0.9
Benzene	C ₆ H ₆	71-43-2	9.24	0.53	0.46	0.54
Benzenethiol	C ₆ H ₅ SH	108-98-5	8.32	0.6	0.7	0.8
Benzoic acid	C ₇ H ₆ O ₂	65-85-0	9.3	NA	0.7	NA
Benzonitrile	C ₇ H ₅ N	100-47-0	9.62	2	0.7	0.8
Benzoquinone, o-	C ₆ H ₄ O ₂	583-63-1	9.3	NA	1	NA
Benzoquinone, p-	C ₆ H ₄ O ₂	106-51-4	10	NA	1	NA

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				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Benzoyl bromide	C7H6BrO	618-32-6	9.65	NA	2	NA
Benzyl 2-phenylacetate	C15H14O2	102-16-9	~9	NA	0.5	NA
Benzyl acetate	C9H10O2	140-11-4	~9	NA	0.6	NA
Benzyl alcohol	C7H8O	100-51-6	8.26	1.3	1.3	1.6
Benzyl chloride	C7H7Cl	100-44-7	9.14	0.58	0.48	0.7
Benzyl formate	C8H8O2	104-57-4	9.32	0.66	0.8	NA
Benzyl isobutyrate	C11H14O2	103-28-6	~9	NA	0.5	NA
Benzyl nitrile	C8H7N	140-29-4	9.39	NA	1	NA
Benzyl propionate	C10H12O2	122-63-4	~9	NA	0.5	NA
Benzylamine	C9H9N	100-46-9	7.56	NA	0.6	NA
Biphenyl	C12H10	92-52-4	8.23	NA	0.4	0.6
Borneol	C10H18O	507-70-0	~9	NA	0.8	NA
Bromine	Br2	7726-95-6	10.55	0.74	15.0	ZR
Bromo-2,2-dimethylpropane, 1-	C5H11Br	630-17-1	10.04	NA	2	NA
Bromo-2-chloroethane, 1-	C2H4Cl	107-04-0	10.57	0.44	8	ZR
Bromo-2-methylpentane, 1-	C6H13Br	25346-33-2	10.09	NA	2	NA
Bromoacetone	C3H5BrO	598-31-2	9.73	NA	1	NA
Bromoacetylene	C2HBr	593-61-3	10.31	NA	4	ZR
Bromobenzene	C6H5Br	108-86-1	8.98	0.34	0.3	0.32
Bromobutane, 1-	C4H9Br	105-65-9	10.13	0.6	1	14
Bromobutane, 2-	C4H9Br	78-76-2	10.01	0.62	1.5	1.6
Bromocyclohexane	C6H11Br	108-85-0	9.87	NA	3	NA
Bromoethane	C2H5Br	74-96-4	10.29	0.79	5.0	ZR
Bromoethanol, 2-	C2H4BrO	540-51-2	10	NA	2	NA
Bromoethyl methyl ether, 2-	C3H7OBr	6482-24-2	10	2	2.5	NA
Bromoform	CHBr3	75-25-2	10.48	0.5	2.8	ZR
Bromopentane, 1-	C5H11Br	203-776-0	10.1	0.47	2	3.5
Bromopropane, 1-	C3H7Br	106-94-5	10.18	0.7	1.3	70
Bromopyridine, 3-	C5H4BrN	636-55-1	9.75	NA	2	NA
Bromopyridine, 4-	C5H4BrN	1120-87-2	9.94	NA	2	NA
Bromotrimethylsilane	C3H9BrSi	2857-97-8	10	1.6	2	2.1
But-2-ynal	C4H4O	1119-19-3	10.2	NA	3	NA
But-3-ynal	C4H4O	52844-23-2	9.85	NA	1.5	NA
Butadiene diepoxide, 1,3-	C4H6O2	1464-53-5	10	1.2	4.0	NA
Butadiene, 1,3-	C4H6	106-99-0	9.07	1.1	0.8	0.8
Butane, n-	C4H10	106-97-8	10.63	1.5	44	ZR
Butanedione, 2,3-	C4H6O2	431-03-8	9.56	1.00	0.4	0.87
Butanoic acid	C4H8O2	107-92-6	10.17	NA	5.0	NA

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				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Butanol, 1-	C4H10O	71-36-3	10.04	1	4.0	25
Butanol, 2-	C4H10O	78-92-2	-	1.2	3.0	8
Buten-3-ol, 1-	C4H8O	598-32-3	9.5	1.3	1.2	3
Butene, 1-	C4H8	106-98-9	9.58	NA	1.5	NA
Butene, 2-	C4H8	107-07-7	9.1	NA	1.3	NA
Butene, cis-2-	C4H8	590-18-1	9.13	NA	1.3	NA
Butene, trans-2-	C4H8	624-64-6	9.13	NA	1.3	NA
Butenoic acid, 3-	C4H6O2	107-93-7	9.75	NA	2	NA
Butoxyethanol, 2-	C6H14O2	111-76-2	8.68	0.62	1.1	NA
Butoxyethoxyethanol	C8H18O3	112-34-5	~10	4.8	1	13
Butoxyethylacetate, 2-	C8H16O3	112-07-2	~9.8	1.3	3	4
Butyl acetate	C6H12O2	123-86-4	9.91	0.8	2.4	12
Butyl acetate, sec-	C6H12O2	105-46-4	9.91	0.8	2.4	5.5
Butyl acetate, tert-	C6H12O2	540-88-5	~9.7	0.83	2.0	1.65
Butyl acrylate	C7H12O2	141-32-2	~9.6	0.6	1.5	NA
Butyl butyrate	C8H16O2	109-21-7	~9.7	NA	1.8	NA
Butyl chloroformate	C5H9O2Cl	592-34-7	~10.4	NA	3.2	ZR
Butyl cyclohexan-1-ol, 4- tert-	C10H20O	98-52-2	~8.8	NA	1.4	NA
Butyl cyclohexyl acetate, 2- tert-	C12H22O2	88-41-5	~10	NA	0.8	NA
Butyl ether, n-	C8H18O	142-96-1	9.28	0.42	0.7	1.1
Butyl glycidyl ether	C7H14O2	192337	~10	NA	2.0	NA
Butyl iodide	C4H9I	542-69-8	9.23	NA	1	NA
Butyl isocyanate	C5H9NO	111-36-4	10.14	NA	2.5	NA
Butyl lactate	C7H14O3	138-22-7	9.8	NA	2.5	NA
Butyl mercaptan	C4H10S	109-79-5	9.15	0.5	0.5	0.8
Butyl mercaptan, tert-	C4H9S	75-66-1	9.03	0.59	0.4	0.62
Butyl methacrylate	C8H14O2	97-88-1	~9.5	NA	1	NA
Butyl propionate, n-	C7H14O2	590-02-1	~9.7	0.80	1.8	4
Butylamine, n-	C4H11N	109-73-9	8.71	2	1.0	10
Butylamine, sec-	C4H11N	513-49-5	8.7	NA	0.9	NA
Butylamine, tert-	C4H11N	75-64-9	8.64	1.1	0.9	1.5
Butylbenzene	C10H14	104-51-8	8.69	NA	0.45	0.45
Butylbenzene, sec-	C10H14	135-98-8	8.68	NA	0.4	0.4
Butylbenzene, tert-	C10H14	98-06-6	8.69	NA	0.4	0.4
Butylene carbonate, 1,2-	C5H8O3	224-651-7	~10.4	3.8	2	ZR
Butylphenol, o-sec-	C10H14O	89-72-5	7.8	NA	0.9	NA
Butyn-1-ol, 2-	C4H6O	764-01-2	9.78	NA	1.5	NA
Butyn-2-one	C4H4O	1423-60-5	10.17	NA	3	NA

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Butyraldehyde	C4H8O	123-72-8	9.86	1.2	1.6	1.9
Butyrolactone, gamma-	C4H6O2	96-48-0	10.26	NA	15.0	NA
Butyronitrile	C4H7N	109-74-0	11.67	2	ZR	ZR
Butyryl chloride	C4H9OCl	141-75-3	~10.4	NA	3.0	ZR
Camphene	C10H16	565-00-4	8.86	NA	0.5	0.4
Camphor	C10H16O	76-22-2	8.76	NA	0.4	NA
Carbon disulfide	CS2	75-15-0	10.08	0.3	1.4	1.3
Carbon suboxide	C3O2	504-64-3	10.6	NA	10	ZR
Carbon tetrabromide	CBr4	558-13-4	10.31	NA	3.0	ZR
Carbon tetrachloride	CCl4	56-23-5	11.47	1.7	ZR	ZR
Carbonyl sulfide	COS	463-58-1	11.18	0.4	ZR	ZR
Carene	C10H16	13466-78-9	8.4	NA	0.5	NA
Carvacrol	C10H14O	499-75-2	~9	NA	0.8	NA
Carvone, R-	C10H14O	6485-40-1	9.77	1.7	1.0	1.5
Caryophyllene	C15H24	13877-93-5	~9	NA	0.4	NA
Chloramine	ClH2N	10599-90-3	9.85	NA	2	NA
Chlorine	Cl2	7782-50-5	11.48	1	ZR	ZR
Chlorine dioxide	ClO2	10049-04-4	10.36	ZR	ZR	ZR
Chloro-1,1-difluoroethene, 2-	C2H3ClF2	359-10-4	9.8	NA	1.5	NA
Chloro-1-fluoroethane, 1-	C2H4ClF	1615-75-4	~11.7	1	ZR	ZR
Chloro-2-fluoroethane, 1-	C2H4ClF	762-50-5	~11.7	1	ZR	ZR
Chloro-2-propanone, 1-	C3H5ClO	28615	9.92	NA	1	NA
Chloroacetaldehyde	C2H3OCl	107-20-0	10.16	NA	3	NA
Chlorobenzene	C6H5Cl	108-90-7	9.07	0.47	0.36	0.5
Chlorobutane, 1-	C4H9Cl	109-69-6	10.64	0.74	10	ZR
Chlorobutane, 2-	C4H9Cl	78-86-4	10.57	1	8	ZR
Chlorocyclohexane	C6H11Cl	542-18-7	10.1	0.5	4	20
Chloroethane	C2H5Cl	75-00-3	10.97	1.1	ZR	ZR
Chloroethanol, 2-	C2H5ClO	107-07-3	10.5	1	10	ZR
Chloroethyl methyl ether, 2-	C3H7ClO	627-42-9	10.25	NA	2.6	NA
Chloroform	CHCl3	67-66-3	11.42	3.5	ZR	ZR
Chloromethane	CH3Cl	74-87-3	11.28	0.74	ZR	ZR
Chloromethoxyethane	C3H7ClO	3188-13-4	10.3	NA	4	ZR
Chloroprene	C4H5Cl	126-99-8	8.79	NA	1.3	NA
Chloropyridine, 2-	C5H4ClN	109-09-1	9	NA	1	NA
Chlorostyrene, o-	C8H7Cl	2039-87-4	~8.5	NA	0.4	NA
Chlorotoluene, m-	C7H7Cl	108-41-8	8.7	NA	0.5	NA
Chlorotoluene, o-	C7H7Cl	95-49-8	8.83	0.6	0.5	NA

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				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Chlorotoluene, p-	C7H7Cl	108-41-8	8.69	0.3	0.39	0.3
Chlorotrifluoroethylene	C2ClF3	79-38-9	9.81	1	1.0	NA
Cinnamic aldehyde	C8H8O	104-55-2	~9	NA	0.4	NA
Cinnamyl acetate	C11H12O2	21040-45-9	~9	NA	0.4	NA
Cinnamyl alcohol	C9H10O	104-54-1	8.1	NA	0.4	NA
Citral	C10H16O	5392-40-5	~8.7	1.7	1.0	3.4
Citronellal	C10H18O	106-23-0	~9	NA	0.9	NA
Citronellol	C10H20O	26489-01-0	~8.5	NA	1.0	NA
Citronellol acetate	C12H22O2	150-84-5	~9	NA	1.5	NA
Citronellol formate	C11H20O2	105-85-1	~9	NA	1.5	NA
Citronellyl isobutyrate	C14H26O2	97-89-2	~9	NA	0.9	NA
Coumarin	C9H6O2	91-64-5	~9	NA	0.4	NA
Creosote	-	8021-39-4	~9	NA	1	NA
Cresol, m-	C7H8O	108-39-4	8.97	0.8	2.2	1.5
Cresol, o-	C7H8O	95-48-7	8.97	NA	1.1	1.5
Cresol, p-	C7H8O	106-44-5	8.97	NA	1.1	1.5
Cresyl acetate, p-	C9H10O	140-39-6	8.6	NA	1.0	NA
Cresyl ethyl ether, p-	C9H12O	622-60-6	~9	NA	0.8	NA
Cresyl methyl ether	C8H10O	104-93-8	~9	NA	0.8	NA
Crotonaldehyde	C4H6O	4170-30-3	9.73	1.4	1.0	2.5
Crotonyl alcohol	C4H8O	6117-91-5	9.13	NA	0.8	NA
Cumene	C9H12	98-82-8	8.75	-	0.32	-
Cycloalkanes	N/A	N/A	~10	NA	1.5	NA
Cyclobutanone	C6H6O	214-745-6	9.35	NA	1.2	NA
Cyclobutene	C4H6	833-35-5	9.43	NA	3	NA
Cycloheptane	C7H14	291-64-5	9.82	NA	1.1	NA
Cyclohex-2-enedione, 1,4-	C6H6O2	4505-38-8	9.77	NA	1	NA
Cyclohexane	C6H12	110-82-7	9.98	0.64	1.2	3.3
Cyclohexanethiol	C6H12S	1569-69-3	~9	NA	0.5	NA
Cyclohexanol	C6H12O	108-93-0	10	0.9	2.9	2.7
Cyclohexanone	C6H10O	108-94-1	9.16	0.8	1.1	1.2
Cyclohexene	C6H10	110-83-8	8.95	0.56	0.8	1.4
Cyclohexyl acetate	C8H14O2	622-45-7	~9.5	NA	1.2	NA
Cyclohexylamine	C6H13N	108-91-8	8.37	6	1.0	0.9
Cyclooctadiene	C8H12	29965-97-7	~9.5	0.5	1	1.1
Cyclopentadiene	C5H6	542-92-7	8.56	NA	0.8	NA
Cyclopentane	C5H10	287-92-3	10.52	0.7	12.0	NA
Cyclopentanone	C5H8O	120-92-3	9.26	0.8	0.7	1

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Cyclopentene	C5H8	142-29-0	9.01	NA	1.5	140
Cyclopentene-1,3-dione, 4-	C5H4O2	930-60-9	9.6	NA	1	NA
Cyclopropylamine	C3H7N	765-30-0	8.80	1.1	0.8	1.7
Cymene, p-	C10H14	99-87-6	8.29	NA	0.35	NA
Decahydronaphthalene	C10H18	91-17-8	9.14	NA	0.9	NA
Decanal	C10H20O	112-31-2	~9	1.6	0.9	NA
Decane	C10H24	124-18-5	9.65	0.37	0.9	4.2
Decyne, 1-	C10H18	764-93-2	9.91	0.37	1.3	0.83
Desfluorane	C3H2F6O	57041-67-5	~11	2	ZR	ZR
Diacetone alcohol	C6H12O2	123-42-2	~9.6	1.2	0.8	0.84
Diazine, 1,2-	C4H4N2	289-80-5	9.65	NA	3	NA
Diazine, 1,3-	C4H4N2	289-95-2	9.33	NA	3	NA
Dibromoacetylene	C2Br2	623-61-3	9.65	NA	1.5	NA
Dibromochloromethane	CHBr2Cl	124-48-1	10.59	0.7	10.0	ZR
Dibromocyclohexane, 1,2-	C6H10Br2	5401-62-7	10.02	NA	3	NA
Dibromocyclopentane	C5H8Br2	33547-17-0	10.06	NA	3	NA
Dibromodichloromethane	CBr2Cl2	594-18-3	10.4	NA	4	ZR
Dibromoethane, 1,2-	C2H4Br2	106-93-4	10.35	0.6	2.0	ZR
Dibromoethene, 1,1-	C2H2Br2	593-92-0	9.78	NA	1.5	NA
Dibromoethene, 1,2-	C2H2Br2	540-49-8	9.63	NA	1.5	NA
Dibromomethane	CH2Br2	74-95-3	10.41	0.70	1.2	ZR
Dichloro-1,1-difluoroethane, 1,2-	C2H2Cl2F2	1649-08-7	~11.5	1	ZR	ZR
Dichloro-1,2-difluoroethane, 1,2-	C2H2Cl2F2	431-06-1	~11.5	1	ZR	ZR
Dichloro-1,2-difluoroethene, 1,2-	C2Cl2F2	598-88-9	10.2	NA	2	NA
Dichloro-1-fluoroethane, 1,1-	C2H3Cl2F	1717-00-6	~11	1	ZR	ZR
Dichloro-1-fluoroethane, 1,2-	C2H3Cl2F	430-57-9	~11	1	ZR	ZR
Dichloro-1-propene, 2,3-	C3H4Cl2	78-88-6	~10.5	0.7	1.4	ZR
Dichloro-2,2-difluoroethene, 1,1-	C2H2Cl2F2	79-35-6	9.69	1	1	NA
Dichloroacetylene	C2Cl2	7572-29-4	9.9	NA	5.0	NA
Dichlorobenzene, o-	C6H4Cl2	95-50-1	9.06	0.48	0.5	0.5
Dichlorobenzene, p-	C6H4Cl2	106-46-7	9.06	0.35	0.5	0.5
Dichloroethane, 1,1-	C2H4Cl2	75-34-3	11.06	2	ZR	ZR
Dichloroethane, 1,2-	C2H4Cl2	107-06-2	11.05	0.6	ZR	ZR
Dichloroethene, 1,1-	C2H2Cl2	75-35-4	10	1	1.0	NA
Dichloroethene, 1,2-	C2H2Cl2	540-59-0	9.65	0.34	0.36	0.29
Dichloroethene, cis-1,2-	C2H2Cl2	156-59-2	9.66	1	0.8	NA
Dichloroethene, trans-1,2-	C2H2Cl2	156-60-5	9.65	0.34	0.36	NA
Dichloromethane	CH2Cl2	27639	11.32	1.00	39	ZR

LEGEND:

NA: The response factor is not available, because the PIDs response is insignificant at toxic concentrations of the compound

ZR: Zero Response

GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Dichloromethylamine	CH3Cl2N	7651-91-4	9.52	NA	2	NA
Dichloropropane, 1,2-	C3H6Cl2	78-87-5	10.87	0.7	ZR	ZR
Dicyclohexylamine	C12H22N	101-83-7	~8.5	NA	0.8	NA
Dicyclopentadiene	C10H12	77-73-6	7.74	0.5	0.9	0.67
Diesel fuel	-	68334-30-5	8	0.4	0.8	NA
Diethoxyethane, 1,1-	C6H14O2	105-57-7	9.78	0.6	0.9	1
Diethyl carbonate	C5H10O3	105-58-8	~10.3	1.2	1.5	ZR
Diethyl ether	C4H10O	60-29-7	9.53	1.9	0.9	NA
Diethyl maleate	C8H12O4	141-05-9	~10	NA	2.0	NA
Diethyl malonate	C7H12O4	105-53-3	10.20	NA	4	ZR
Diethyl phthalate	C12H14O4	84-66-2	~9	NA	1.0	NA
Diethyl sulfate	C4H10SO4	64-67-5	~10.5	NA	3.0	ZR
Diethyl sulfide	C4H10S	352-93-2	8.43	1	0.6	0.5
Diethyl sulfone	C4H10O2S	597-35-3	9.96	NA	2	NA
Diethylacetylene	C6H10	928-49-4	10.03	NA	2	NA
Diethylamine	C4H11N	109-89-7	8.01	0.6	1.3	0.8
Diethylaminoethanol, 2-	C6H15NO	100-37-8	8.58	NA	2.7	NA
Diethylaminopropylamine, 3-	C7H18N2	104-78-9	~9	3	1.2	3
Diethylene glycol monoethyl ether	C6H14O3	111-90-0	~9	NA	0.6	NA
Diethylenetriamine	C4H13N3	111-40-0	~9	NA	0.9	NA
Diethylhydroxylamine	C4H12NO	3710-84-7	~10	1.2	2	1.5
Diethylsilane	C4H12Si	542-91-6	9.8	NA	2	NA
Diglycidyl ether	C6H10O3	123639	~9.6	NA	3.0	NA
Dihydroeugenol	C10H14O2	2785-87-7	~9	NA	0.4	NA
Dihydrojasnone	C11H18O	1128-08-1	~9	NA	0.6	NA
Dihydromyrcenol	C10H20O	18479-58-8	~9	NA	0.8	NA
Dihydroxybenzene, 1,2-	C6H6O2	120-80-9	8.56	NA	1.0	NA
Dihydroxybenzene, 1,3-	C6H6O2	108-46-3	8.63	NA	1.0	NA
Diiodomethane	CH2I2	27704	9.46	NA	1.2	NA
Diisobutyl ketone	C9H18O	108-83-8	9.04	NA	0.8	0.7
Diisobutylene	C8H16	107-39-1	8.909	0.50	0.6	0.9
Diisopropyl ether	C6H14O	108-20-3	9.2	0.62	0.7	0.95
Diisopropylamine	C6H15N	108-18-9	7.73	0.53	0.7	0.6
Diisopropylbenzene	C12H18	25321-09-9	~8.8	NA	0.4	NA
Diketene	C4H4O2	674-82-8	9.6	1.4	2.2	NA
Dimethoxybenzene, 1,4-	C8H10O2	150-78-7	~9	NA	1.3	NA
Dimethoxyethane, 1,2-	C3H8O	109-87-5	9.3	0.6	1.2	1.2
Dimethoxymethane	C3H8O2	109-87-5	10	1.2	1.4	13

LEGEND:

NA: The response factor is not available, because the PIDs response is insignificant at toxic concentrations of the compound

ZR: Zero Response

GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Dimethyl carbonate	C3H6O3	616-38-6	10.52	1.5	2.0	ZR
Dimethyl disulfide	C2H6S2	624-92-0	8.46	NA	0.2	NA
Dimethyl ether	C2H6O	115-10-6	10.03	NA	1.3	NA
Dimethyl phosphite	C2H7O3P	868-85-9	10.53	NA	8	ZR
Dimethyl phthalate	C10H10O4	131-11-3	9.64	NA	1.0	NA
Dimethyl sulfate	C2H6O4S	77-78-1	~12	2.3	ZR	ZR
Dimethyl sulfoxide	C2H6OS	67-68-5	9.1	9	1.0	32
Dimethylacetamide N,N-	C4H9NO	127-19-5	8.81	0.8	1.3	NA
Dimethylacetylene	C4H6	503-17-3	9.58	NA	1	NA
Dimethylamine	C2H7N	124-40-3	8.24	2	1.4	NA
Dimethylaminoethanol, 2-	C4H11NO	108-01-0	8.8	NA	1.5	NA
Dimethylaniline, NN-	C8H11N	121-69-7	7.12	NA	0.6	0.5
Dimethylboron bromide	C2H6BBr	5158-50-9	10.25	NA	4	NA
Dimethylbutyl acetate, 1,3-	C8H16O2	108-84-9	~9.5	2	1.6	NA
Dimethylcycloheptane, 1,2-	C9H18	13151-50-3	10.21	NA	1.3	NA
Dimethylcyclohexane, 1,2-	C8H16	583-57-3	9.41	0.45	0.8	0.9
Dimethylcyclopentane	C7H14	1192-18-3	9.92	NA	1.2	NA
Dimethylethylamine, NN-	C4H11N	598-56-1	7.74	1.2	3	1.7
Dimethylformamide	C3H7NO	25174	9.13	1.12	0.8	1.1
Dimethylhydrazine, 1,1-	C2H8N2	57-14-7	8.05	0.8	1.0	NA
Dimethylmethylphosphonate	C3H9PO3	756-79-6	9.94	NA	5	NA
Dimethyloctan-1-ol, 3,7-	C10H22O	106-21-8	~9	NA	1.2	NA
Dimethyloctan-3-ol, 3,7-	C10H22O	78-69-3	~9	NA	1.2	NA
Dimethylpentane, 2,4-	C7H16	108-08-7	~9.8	NA	1.0	NA
Dimethylsilane	C2H8Si	1111-74-6	10.3	NA	2	ZR
Dimethylthiophosphoryl chloride	C2H6ClO2PS	2524-03-0	~9	NA	1.0	NA
Di-n-butylamine	C8H19N	111-92-2	7.69	1	0.9	4
Di-n-propylamine	C6H15N	142-84-7	7.8	0.7	1	1.5
Dioxane, 1,4-	C4H8O2	123-91-1	9.13	0.85	1.5	1.7
Dioxolane	C3H6O2	646-06-0	9.13	1.47	1.8	4.5
Dipentene	C10H16	138-86-3	~8.6	1	0.9	0.8
Diphenyl ether	C12H10O	101-84-8	8.09	1.4	0.8	1.7
Dipropyl ether	C6H14O	111-43-3	9.3	NA	0.8	NA
Dipropylene glycol	C6H14O3	110-98-5	~10	NA	4	NA
Disilane	Si2H6	1590-87-0	9.74	NA	2	NA
Disulfur dibromide	S2Br2	13172-31-1	9.23	NA	1.5	NA
Disulfur dichloride	S2Cl2	10025-67-9	9.4	NA	3	NA
Di-tert-butyl-p-cresol	C15H24O	128-37-0	7.8	NA	0.3	NA

LEGEND:

NA: The response factor is not available, because the PIDs response is insignificant at toxic concentrations of the compound

ZR: Zero Response

GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Divinylbenzene	C10H10	1321-74-0	~8.2	NA	0.4	0.4
Divinylbenzene, 1,3-	C10H10	108-57-6	~8.3	NA	0.3	0.25
Dodecene	C12H24	112-40-3	~8.8	NA	0.8	NA
Epichlorohydrin	C3H5ClO	106-89-8	10.2	0.8	3.4	30
Epoxypropyl isopropyl ether, 2,3-	C6H12O2	4016-14-2	~10	0.6	1.1	1.1
Estragole	C10H12O	140-67-0	~9	NA	0.7	NA
Ethane	C2H6	74-84-0	11.56	3	ZR	ZR
Ethanol	C2H6O	64-17-5	10.43	3	8.7	ZR
Ethanolamine	C2H7NO	141-43-5	10.47	3	3.0	ZR
Ethoxy-2-methylpropane, 1-	C6H14O	627-02-1	9.3	NA	0.8	NA
Ethoxy-2-propanol, 1-	C5H10O2	1569-02-4	~9.6	0.8	2.0	NA
Ethoxy-butane, 2-	C6H14O	19316-73-5	9.32	NA	0.8	NA
Ethoxyethanol, 2-	C4H10O2	110-80-5	9.6	1.7	2.0	5
Ethoxyethyl acetate, 2-	C6H12O3	111-15-9	~10	NA	3.0	NA
Ethyl 2,2,2-trifluoroethyl ether	C4H7F3O	461-24-5	10.27	NA	5	NA
Ethyl 2-methylbutyrate	C7H14O2	7452-79-1	~9	0.72	2.0	1.8
Ethyl acetate	C4H8O2	141-78-6	10.01	1.4	3.6	40
Ethyl acetoacetate	C6H10O3	141-97-9	~9.5	2.2	3	3
Ethyl acrylate	C5H8O2	140-88-5	10.3	1.0	2.0	15
Ethyl benzoate	C9H10O2	93-89-0	8.9	NA	0.9	NA
Ethyl butyrate	C6H12O2	105-54-4	~9.9	1	1.0	3.3
Ethyl chloroformate	C3H5O2Cl	541-41-3	10.64	2	83.0	ZR
Ethyl cyanoacrylate	C6H7O2N	7085-85-0	~10	NA	1.5	NA
Ethyl decanoate	C12H24O2	110-38-3	~9.6	NA	1.8	NA
Ethyl formate	C3H6O2	109-94-4	10.61	1.76	29.8	ZR
Ethyl hexanoate	C8H16O2	123-66-0	~9.75	0.7	2.6	3.3
Ethyl hexanol, 2-	C8H18O	105-76-7	~9.8	1	1.5	NA
Ethyl hexyl acrylate, 2-	C11H20O2	103-11-7	~9	0.5	1.0	NA
Ethyl iodide	C2H5I	27459	9.34	0.3	1.2	0.3
Ethyl isopropyl ketone	C6H12O	565-69-5	9.1	NA	0.8	NA
Ethyl lactate	C5H10O3	97-64-3	~10	1.09	3.0	5
Ethyl mercaptan	C2H6S	27607	9.29	0.6	0.56	0.55
Ethyl methacrylate	C6H10O2	97-63-2	~9.5	0.86	1.5	1.6
Ethyl methyl carbonate	C4H8O3	623-53-0	10.4	1.2	1.5	ZR
Ethyl morpholine, 4-	C6H13NO	100-74-3	~8	0.9	0.6	2
Ethyl octanoate	C10H20O2	106-32-1	~9.7	NA	2.3	NA
Ethyl phenyl acetate	C10H12O2	101-97-3	~9	NA	1.2	NA
Ethyl propionate	C5H10O2	105-37-3	10.01	1.2	2	6

LEGEND:

NA: The response factor is not available, because the PIDs response is insignificant at toxic concentrations of the compound

ZR: Zero Response

GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Ethyl perfluorobutyl ether	C6H5F9O	163702-05-4	~11	20	ZR	ZR
Ethyl tert-butyl ether	C6H14O	637-92-3	9.39	NA	0.6	NA
Ethyl-2-methyl benzene, 1-	C9H12	611-14-3	~8.4	NA	0.45	0.5
Ethyl-3-ethoxypropionate	C7H14O3	763-69-9	~9.5	NA	3	NA
Ethylacetylene	C4H6	107-00-6	10.18	NA	3	NA
Ethylamine	C2H7N	27491	8.86	1	1.0	NA
Ethylbenzene	C8H10	100-41-4	8.76	0.54	0.5	0.6
Ethylcyclohexane	C8H16	1678-91-7	9.54	0.48	1	1.3
Ethylene	C2H4	74-85-1	10.51	3	8.0	ZR
Ethylene carbonate	C3H4O3	96-49-1	10.4	NA	3	ZR
Ethylene cyanohydrin	C3H5NO	109-78-4	~10.8	1	ZR	ZR
Ethylene glycol	C2H6O2	107-21-1	10.16	4.1	20.0	9
Ethylene glycol diacetate	C6H10O4	111-55-7	~10	NA	4	NA
Ethylene glycol monopropyl ether	C5H12O2	2807-30-9	~9	1.7	3.0	4
Ethylene oxide	C2H4O	75-21-8	10.56	2	15.0	ZR
Ethylenediamine	C2H8N2	107-15-3	8.6	8	0.8	10
Ethyleneimine	C2H5N	2179-59-1	9.2	NA	2	NA
Ethylhexanal, 2-	C8H16O	123-05-7	~9	NA	1.5	NA
Ethylhexanoic acid, 2-	C8H16O2	149-57-5	~10	2.9	2	16
Ethylhexenal, 2-	C8H14O	645-62-5	~9	NA	1.3	NA
Eucalyptol	C10H18O	470-82-6	~9	NA	0.6	NA
Eugenol	C10H12O2	97-53-0	~9	NA	0.4	NA
Eugenol methyl ether	C11H14O2	93-15-2	~9	NA	0.4	NA
Fenchol	C10H18O	1632-73-1	~9	NA	0.4	NA
Ferrocene	C10H10Fe	102-54-5	6.88	NA	0.8	NA
Fluoro-2-propanone, 1-	C3H5FO	430-51-3	9.92	1	ZR	NA
Fluorobenzene	C6H5F	462-06-6	9.2	0.78	0.8	0.83
Fluorobenzoic acid, 4-	C7H5FO2	456-22-4	9.91	NA	2	NA
Formaldehyde	CH2O	50-00-0	10.87	0.6	ZR	ZR
Formamide	CH3ON	27735	10.2	NA	2.0	NA
Formic acid	CH2O2	64-18-6	11.05	5	ZR	ZR
Furan	C4H4O	110-00-9	8.88	NA	0.4	NA
Furfural	C5H4O2	35796	9.21	0.5	0.82	NA
Furfuryl alcohol	C5H6O2	98-00-0	~9.9	NA	2.0	NA
Furfuryl mercaptan	C5H6OS	35828	~9	0.60	0.5	0.8
Gasoline	N/A	8006-61-9	~9.9	NA	0.8	1
Geranial	C10H16O	141-27-5	~9	NA	0.6	NA
Geraniol	C10H18O	106-24-1	~9	NA	0.7	NA

LEGEND:

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GM460

PID RESPONSE FACTORS



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Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Geranyl acetate	C ₁₂ H ₂₀ O ₂	105-87-3	~9	NA	1.2	NA
Germane	GeH ₄	7782-65-2	11.34	NA	10.0	ZR
Glutaraldehyde	C ₅ H ₈ O ₂	111-30-8	~9.6	0.6	0.9	NA
Glycidol	C ₃ H ₆ O ₂	556-52-5	~10.8	2	ZR	ZR
Glycidyl methacrylate	C ₇ H ₁₀ O ₃	106-91-2	~10	NA	1.2	ZR
Glycolaldehyde	C ₂ H ₄ O ₂	141-46-8	~10.4	NA	5	ZR
Glyoxal	C ₂ H ₂ O ₂	107-22-2	10.2	NA	1	NA
Guaiaicol	C ₇ H ₈ O ₂	90-05-1	~9	NA	0.8	NA
Halothane	CF ₃ CHBrCl	151-67-7	11	0.6	ZR	ZR
Heptan-2-one	C ₇ H ₁₄ O	110-43-0	9.33	0.54	0.7	0.97
Heptan-3-one	C ₇ H ₁₄ O	106-35-4	9.02	0.59	0.8	0.81
Heptane	C ₇ H ₁₆	142-82-5	9.92	0.5	1.6	11
Heptanol	C ₇ H ₁₆ O	53535-33-4	~9.8	NA	1.7	NA
Heptene, 1-	C ₇ H ₁₄	592-76-7	9.34	0.51	0.9	1.1
Heptylcyclopentan-1-one, 2-	C ₁₂ H ₂₂ O	137-03-1	~9	NA	0.8	NA
Heptyne, 1-	C ₇ H ₁₂	628-71-7	10.04	NA	2	NA
Hex-1-en-3-ol	C ₆ H ₁₂ O	4798-44-1	~9	NA	0.9	NA
Hexachlorodisilane	Cl ₆ Si ₂	13465-77-5	10.4	NA	8	ZR
Hexachloroethane	C ₂ Cl ₆	67-72-1	11.22	1	ZR	ZR
Hexafluoropropylene	C ₃ F ₆	116-15-4	10.6	4	ZR	ZR
Hexamethyldisilazane, 1,1,1,3,3,3-	C ₆ H ₁₉ NSi ₂	999-97-3	8.6	0.53	1.0	0.5
Hexamethyldisiloxane	C ₆ H ₁₈ O ₂ Si ₂	107-46-0	9.6	NA	0.3	NA
Hexamethylene diisocyanate	C ₈ H ₁₂ N ₂ O ₂	822-06-0	~9	NA	1.5	NA
Hexan-2-one	C ₆ H ₁₂ O	591-78-6	9.34	NA	0.8	0.7
Hexane	C ₆ H ₁₄	110-54-3	10.13	0.6	2.6	13
Hexanoic acid	C ₆ H ₁₂ O ₂	142-62-1	10.12	NA	3	NA
Hexanol	C ₆ H ₁₄ O	111-27-3	9.89	0.66	2	7
Hexene, 1-	C ₆ H ₁₂	592-41-6	9.44	0.61	0.9	1.1
Hexenyl acetate, cis-3-	C ₈ H ₁₄ O ₂	3681-71-8	~9	0.55	1.5	1.2
Hexenyl butyrate, cis-3-	C ₁₀ H ₁₈ O ₂	16491-36-4	~9	NA	1.5	NA
Hexylaldehyde	C ₆ H ₁₂ O	66-25-1	9.72	0.54	0.6	1.8
Hydrazine	H ₄ N ₂	302-01-2	8.93	2.1	3.0	NA
Hydrogen iodide	HI	10034-85-2	10.39	NA	5	ZR
Hydrogen selenide	H ₂ Se	2148909	9.88	NA	2.0	NA
Hydrogen sulfide	H ₂ S	2148878	10.46	1.5	4.0	ZR
Hydrogen telluride	H ₂ Te	2148973	9.14	NA	1.5	NA
Hydroxybutanal, 3-	C ₄ H ₈ O ₂	107-89-1	~9	NA	2	NA
Hydroxycitronellal	C ₁₀ H ₂₀ O ₂	107-75-5	~9	NA	1.0	NA

LEGEND:

NA: The response factor is not available, because the PIDs response is insignificant at toxic concentrations of the compound

ZR: Zero Response

GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Hydroxyethyl acrylate	C5H8O3	818-61-1	~10	NA	1.2	NA
Hydroxylamine	H3NO	7803-49-8	10	NA	2	NA
Hydroxypropyl acrylate, 2-	C6H10O3	999-61-1	~9	NA	1.5	NA
Indene	C9H8	95-13-6	8.81	NA	0.5	0.4
Indole	C8H7N	120-72-9	7.76002	NA	0.4	NA
Iodine	I2	7553-56-2	9.31	0.1	0.18	0.1
Iodobenzene	C5H5I	591-50-4	8.73	NA	0.2	NA
Iodoethene	C2H3I	593-66-8	9.3	NA	1.2	NA
Iodoform	CHI3	75-47-8	9.25	NA	1.5	NA
Iodomethane	CH3I	74-88-4	9.54	0.26	0.4	NA
Isoalkanes, C10-C13	C8H18O	68551-17-7	~9.6	NA	1	NA
Isoamyl acetate	C7H14O2	123-92-2	~9.7	0.66	1.6	6
Isoamyl salicylate	C12H16O3	87-20-7	~9	NA	1.0	NA
Isoamylene	C5H10	513-35-9	8.69	0.63	1	0.86
Isobornyl acetate	C12H20O2	125-12-2	~9	NA	0.4	NA
Isobutane	C4H10	75-28-5	10.57	1.2	8.0	ZR
Isobutanol	C4H10O	78-83-1	10.12	1.1	3.5	13
Isobutyl acetate	C6H12O2	110-19-0	9.9	0.8	2.3	10
Isobutyl acrylate	C7H12O2	106-63-8	~9.5	0.80	1.3	5
Isobutylbenzene	C10H14	538-93-2	8.68	NA	0.4	0.4
Isobutylene	C4H8	115-11-7	9.24	1	1	1
Isobutylene epoxide	C4H8O	558-30-5	10	NA	3	NA
Isobutyraldehyde	C4H8O	78-84-2	9.74	NA	1.2	NA
Isobutyric acid	C4H8O2	79-31-2	10.24	1.8	4	15
Isodecanol	C10H22O	25339-17-7	~9.8	1	0.9	NA
Isoeugenol	C10H12O2	97-54-1	~9	NA	0.4	NA
Isoflurane	C3H2ClF5O	26675-46-7	~11	50	ZR	ZR
Isoheptane	C7H16	591-76-4	9.84	NA	1.2	NA
Isojasmone	C11H18O	95-41-0	~9	NA	0.7	NA
Isomenthone	C10H18O	1196-31-2	9.86	NA	0.6	NA
Isononanal	C9H18O	5435-64-3	~9.6	0.5	9	1.4
Isononanol	C9H20O	3452-97-9	~9.8	1	1.5	NA
Isooctane	C8H18	565-75-3	9.86	0.51	0.74	3.2
Isooctanol	C8H18O	26952-21-6	~9.8	1	1.7	NA
Isopentane	C5H12	78-78-4	10.32	4	4.0	ZR
Isopentene	C5H10	563-46-2	9.12	NA	0.8	NA
Isophorone	C9H14O	78-59-1	9.07	1.1	0.8	1
Isophorone diisocyanate	C12H18N2O2	4098-71-9	~9	NA	0.6	NA

LEGEND:

NA: The response factor is not available, because the PIDs response is insignificant at toxic concentrations of the compound

ZR: Zero Response

GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Isoprene	C ₅ H ₈	78-79-5	8.85	0.57	0.8	1
Isopropanol	C ₃ H ₈ O	67-63-0	10.17	2	4.4	25
Isopropanolamine	C ₃ H ₉ NO	78-96-6	~ 9.6	NA	1.5	NA
Isopropoxyethanol, 2-	C ₅ H ₁₂ O ₂	109-59-1	~10.3	0.8	1.5	1.5
Isopropyl acetate	C ₅ H ₁₀ O ₂	108-21-4	9.99	1.1	2.2	8
Isopropyl chloroformate	C ₄ H ₇ O ₂ Cl	108-23-6	~10.2	NA	1.6	NA
Isopropyl mercaptan	C ₃ H ₈ S	75-33-2	9.15	NA	0.56	NA
Isopropyl nitrite	C ₃ H ₇ NO ₂	541-42-4	10.23	NA	4	NA
Isopropylamine	C ₃ H ₉ N	75-31-0	8.72	1	1.2	1
Isopropylaminoethanol, 2-	C ₅ H ₁₃ NO	109-56-8	~9	NA	2.0	NA
Isopropylcyclohexane	C ₉ H ₁₈	696-29-7	9.33	0.53	0.9	1.1
Isothiazole	C ₃ H ₃ NS	288-16-4	9.55	NA	3	NA
Isovaleraldehyde	C ₅ H ₁₀ O	590-86-3	9.72	0.8	1.3	1.5
Isovaleric acid	C ₅ H ₁₀ O ₂	503-74-2	~10.2	1.6	3	25
Isoxazole	C ₃ H ₃ NO	288-14-2	9.96	NA	6	NA
Jasmal	C ₁₁ H ₂₂ O ₃	1322-17-4	~9	NA	1.4	NA
Jasmone, cis-	C ₁₁ H ₁₆ O	488-10-8	~9	NA	0.5	NA
Jet Fuel JP-4	N/A	N/A	~9	0.42	0.8	0.7
Jet Fuel JP-5	N/A	N/A	~9	0.46	0.7	0.6
Jet Fuel JP-8	N/A	N/A	~9	0.32	0.7	0.6
Kerosene	N/A	8008-20-6	~8	NA	0.8	0.7
Ketene	C ₂ H ₂ O	463-51-4	9.617	NA	3.0	NA
Linalool oxide	C ₁₀ H ₁₈ O ₂	14049-11-7	~9	NA	0.6	NA
Linalyl acetate	C ₁₂ H ₂₀ O ₂	115-95-7	~9	NA	0.9	NA
Maleic anhydride	C ₄ H ₂ O ₃	108-31-6	9.9	NA	2.0	NA
Menthol	C ₁₀ H ₂₀ O	1490-04-6	~9	NA	0.5	NA
Menthone	C ₁₀ H ₁₈ O	89-80-5	~9	NA	0.4	NA
Mercaptoacetic acid	C ₂ H ₄ O ₂ S	25143	~9.8	NA	1.0	NA
Metaldehyde	C ₈ H ₁₆ O ₄	108-62-3	~9.7	NA	2	NA
Methacrylamide	C ₄ H ₇ NO	79-39-0	~10	NA	2	ZR
Methacrylic acid	C ₄ H ₆ O ₂	79-41-4	10.15	NA	2.3	NA
Methacrylonitrile	C ₄ H ₅ N	126-98-7	10.34	NA	5.0	ZR
Methanol	CH ₄ O	67-56-1	10.85	2.9	200.0	ZR
Methanol	CH ₄ O	67-56-1	10.85	2.9	ZR	ZR
Methoxy-1-butanol, 3-	C ₅ H ₁₂ O ₂	2517-43-3	~9.56	NA	3	NA
Methoxy-1-propanol, 2-	C ₄ H ₁₀ O ₂	1589-47-5	9.3	NA	2	NA
Methoxy-2,2-dimethylpropane	C ₆ H ₁₄ O	1118-00-9	9.3	NA	0.7	NA
Methoxybutyl acetate, 3-	C ₇ H ₁₄ O ₃	4435-53-4	~9	NA	2	NA

LEGEND:

NA: The response factor is not available, because the PIDs response is insignificant at toxic concentrations of the compound

ZR: Zero Response

GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Methoxyethane	C3H8O	540-67-0	9.72	NA	1	NA
Methoxyethanol, 2-	C3H8O2	109-86-4	9.6	1.4	2.7	NA
Methoxyethene	C3H6O	107-25-5	8.95	NA	1	NA
Methoxyethoxyethanol, 2-	C5H12O3	111-77-3	10	0.9	1.4	NA
Methoxyethyl acetate	C5H10O3	110-49-6	~9.6	2	2.7	8
Methoxyethyl ether, 2-	C6H14O3	111-96-6	9.8	NA	0.8	NA
Methoxymethylethoxy-2-propanol	C7H16O3	34590-94-8	~10	NA	1.3	NA
Methoxypropan-2-ol, 1-	C4H10O2	107-98-2	~9.6	0.95	2.0	2.7
Methoxypropane, 2-	C4H10O	555-17-5	9.45	NA	0.9	NA
Methoxypropyl acetate	C6H12O3	108-65-6	~9	0.74	1.2	2.1
Methyl 2-methylpropanoate	C5H10O2	547-63-7	9.86	NA	2	NA
Methyl acetate	C3H6O2	79-20-9	10.27	1.8	5.2	ZR
Methyl acetoacetate	C5H8O3	105-45-3	9.81	NA	3	NA
Methyl acrylate	C4H6O2	96-33-3	10.25	1.1	3.4	80
Methyl anthranilate	C8H9NO2	134-20-3	~9	NA	0.4	NA
Methyl benzoate	C8H8O2	93-58-3	9.32	NA	1.2	NA
Methyl bromide	CH3Br	74-83-9	10.54	1.3	1.9	ZR
Methyl cyanoacrylate	C5H5O2N	137-05-3	10.98	2	ZR	ZR
Methyl dimethylacrylate	C6H10O2	924-50-5	~9.6	NA	2.5	NA
Methyl ethyl ketone	C4H8O	78-93-3	9.51	1.2	0.8	2
Methyl ethyl ketone peroxide	C8H18O6	1338-23-4	~9	NA	0.8	NA
Methyl heptyne carbonate	C9H14O2	111-12-6	~9	NA	1.3	NA
Methyl ionone	C14H22O	1335-46-2	~9	NA	0.4	NA
Methyl isobutyl ketone	C6H12O	108-10-1	9.3	0.7	0.8	1.01
Methyl isocyanate	C2H3NO	624-83-9	10.67	1.5	5.0	ZR
Methyl isopropyl ketone	C5H10O	563-80-4	9.31	0.92	0.8	0.96
Methyl isothiocyanate	C2H3NS	556-61-6	9.25	0.4	0.6	NA
Methyl mercaptan	CH4S	74-93-1	9.44	1	0.7	0.6
Methyl methacrylate	C5H8O2	80-62-6	9.7	0.92	1.6	2.1
Methyl perfluorobutyl ether	C5H3F9O	163702-07-6	~11	30	ZR	ZR
Methyl phenyl acetate	C9H10O2	101-41-7	~9	NA	0.4	NA
Methyl propargyl ether	C4H6O	627-41-8	9.78	NA	2	NA
Methyl propionate	C4H8O2	554-12-1	10.15	1.46	1.5	36
Methyl propynoate	C4H4O2	922-67-8	10.3	0.90	10	ZR
Methyl salicylate	C8H8O3	119-36-8	7.65	NA	0.8	NA
Methyl sulfide	C2H6S	75-18-3	8.69	0.6	0.5	0.7
Methyl tert-butyl ether	C5H12O	1634-04-4	9.24	0.8	0.8	1.02
Methyl thiocyanate	C2H3NS	556-64-9	9.96	1.5	2	3.2

LEGEND:

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GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Methyl thioglycolate	C3H6O2S	2365-48-2	~10	1	1	4
Methyl undecanal, 2-	C12H24O	110-41-8	~9	1.7	1.1	NA
Methyl vinyl ketone	C4H6O	78-94-4	9.65	NA	0.6	NA
Methyl-1-butene, 3-	C5H10	563-45-1	9.51	NA	0.8	NA
Methyl-2-butanol, 3-	C5H12O	6032-29-7	9.88	NA	3.3	NA
Methyl-2-hexenoic acid, trans-3-	C7H12O2	027960-21-0	~10	NA	1.5	NA
Methyl-2-propen-1-ol, 2-	C4H8O	513-42-8	9.24	1.2	1.1	1.6
Methyl-2-pyrrolidinone, N-	C5H9NO	872-50-4	9.17	0.9	0.9	NA
Methyl-5-hepten-2-one, 6-	C8H14O	110-93-0	~9.4	0.89	0.8	0.76
Methylamine	CH5N	74-89-5	8.97	1	1.4	NA
Methylbutan-1-ol, 3-	C5H12O	123-51-3	9.8	0.8	3.0	10
Methylbutanal, 2-	C5H10O	96-17-3	9.59	0.8	1.5	1.3
Methylbutanol	C5H12O	137-32-6	9.86	-	1.5	-
Methylbutyric acid, 2-	C5H10O2	116-53-0	~10.2	1.6	3.5	20
Methylchloroformate	C2H3O2Cl	79-22-1	11.36	1	ZR	ZR
Methylcyclohexane	C7H14	108-87-2	9.85	0.53	1.1	1
Methylcyclohexanol	C7H14O	25639-42-3	9.8	NA	2.4	NA
Methylcyclohexanol, 4-	C7H14O	589-91-3	9.8	NA	2.4	NA
Methylcyclohexanone, 2-	C7H12O	583-60-8	9.05	NA	1.0	NA
Methylcyclopentane	C6H12	96-37-7	9.85	NA	1.5	NA
Methylenepentane, 3-	C6H12	760-21-4	9.06	NA	0.8	NA
Methylheptan-3-one, 5-	C8H16O	541-85-5	~9.1	0.56	0.8	0.88
Methylhexan-2-one, 5-	C7H14O	110-12-3	9.28	0.58	0.8	0.91
Methylhydrazine	CH6N2	60-34-4	8	1.3	1.3	NA
Methylpent-3-en-2-one, 4-	C6H10O	141-79-7	9.1	1.1	0.7	0.66
Methylpentan-2-ol, 4-	C6H14O	108-11-2	~9.8	0.68	2.8	3
Methylpentane, 2-	C6H14	107-83-5	10.12	0.58	1.5	34
Methylpentane, 3-	C6H14	96-14-0	10.08	0.64	1.5	24
Methylpentane-2,4-diol, 2-	C6H14O2	107-41-5	~9.6	NA	4.0	NA
Methylpropanoyl chloride, 2-	C4H7ClO	79-30-1	~9	1.8	6.0	40
Methylpyrrole, N-	C5H7N	96-54-8	7.95	0.56	0.5	0.8
Methylstyrene	C9H10	25013-15-4	8.3	1	0.5	0.5
Methylthiopropional, 3-	C4H8OS	3268-49-3	~9.5	NA	2	NA
Mineral oil	N/A	8042-47-5	~9	NA	0.8	0.7
Mineral spirits	N/A	64475-85-0	~9	0.39	0.8	0.7
Monoisobutanolamine	C4H11NO	124-68-5	~9	NA	1.6	NA
Morpholine	C4H9NO	110-91-8	8.88	1	2.0	2
Myrcene	C10H16	123-35-3	~8.2	NA	0.5	NA

LEGEND:

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GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

	Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor			
					11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp	
N	Naphtha, hydrotrated heavy	C _n H _(2n+2)	64742-48-9	~10	NA	1	NA	
	Naphthalene	C ₁₀ H ₈	91-20-3	8.14	0.4	0.4	0.4	
	Naphthol methyl ether, 2-	C ₁₁ H ₁₀ O	34068	~9	NA	0.5	NA	
	Neopentane	C ₅ H ₁₂	463-82-1	10.21	NA	3	NA	
	Neopentyl alcohol	C ₅ H ₁₂ O	75-84-3	9.72	NA	2	NA	
	Nitric oxide	NO	10102-43-9	9.27	2.8	8.0	NA	
	Nitrobenzene	C ₆ H ₅ NO ₂	98-95-3	9.92	1.6	1.7	NA	
	Nitroethane	C ₂ H ₅ NO ₂	79-24-3	10.88	2.4	ZR	ZR	
	Nitrogen dioxide	NO ₂	10102-44-0	9.58	4.5	10.0	14	
	Nitromethane	CH ₃ NO ₂	75-52-5	11.08	2.71	ZR	ZR	
	Nitropropane, 2-	C ₃ H ₇ NO ₂	79-46-9	10.71	2	ZR	ZR	
	N-Methylolacrylamide	C ₄ H ₇ NO ₂	924-42-5	~10.3	NA	2	ZR	
	Nonane	C ₉ H ₂₀	111-84-2	9.72	0.4	1.3	4.7	
	Nonanol (mixed isomers)	C ₉ H ₂₀ O	143-08-8	~9.8	NA	1.2	NA	
	Nonene (mixed isomers)	C ₉ H ₁₈	27215-95-8	~8.8	NA	0.8	NA	
	Nonene, 1-	C ₉ H ₁₈	124-11-8	~8.8	NA	0.55	NA	
	Norbornadiene, 2,5-	C ₇ H ₈	121-46-0	8.38	0.52	0.6	0.7	
	O	Octamethyltrisiloxane	C ₈ H ₂₄ O ₂ Si ₃	107-51-7	10.04	NA	0.3	NA
		Octane	C ₈ H ₁₈	111-65-9	9.8	0.44	1.3	7
		Octanol (mixed isomers)	C ₈ H ₁₈ O	111-87-5	~9.8	NA	1.5	NA
Octene (mixed isomers)		C ₈ H ₁₆	25377-83-7	9.4	NA	0.9	NA	
Octene, 1-		C ₈ H ₁₆	111-66-0	9.43	0.43	0.58	1.1	
Oxalyl bromide		C ₂ Br ₂ O ₂	15219-34-8	10.49	NA	5	ZR	
Oxydiethanol, 2,2-		C ₄ H ₁₀ O ₃	111-46-6	~10.3	NA	2.0	ZR	
P		Paraffin wax, fume	N/A	8002-74-2	~10	NA	1.0	NA
		Paraffins, normal	N/A	64771-72-8	~9.5	1	1.0	NA
		Paraldehyde	C ₆ H ₁₂ O ₃	123-63-7	~9.7	0.75	2	4.8
	Pentacarbonyl iron	FeC ₅ O ₅	13463-40-6	~8	NA	1.0	NA	
	Pentan-2-one	C ₅ H ₁₀ O	107-87-9	9.38	0.9	0.8	1.03	
	Pentan-3-one	C ₅ H ₁₀ O	96-22-0	9.31	1	0.8	0.75	
	Pentanal	C ₅ H ₁₀ O	110-62-3	9.74	0.7	1.2	1.75	
	Pentandione, 2,4-	C ₅ H ₈ O ₂	123-54-6	8.85	0.72	0.8	0.85	
	Pentane	C ₅ H ₁₂	109-66-0	10.35	0.70	5	ZR	
	Pentanoic acid	C ₅ H ₁₀ O ₂	109-52-4	10.53	1.6	4	52	
Pentanol, 2-	C ₅ H ₁₂ O	6032-29-7	9.78	1	1.5	16		
Pentanol, 3-	C ₅ H ₁₂ O	584-02-1	9.76	0.9	1.5	3.5		
Pentene, 1-	C ₆ H ₁₂	109-67-1	9.49	0.63	1.3	1		
Pentylcyclopentan-1-one, 2-	C ₁₀ H ₁₈ O	4819-67-4	~9	NA	1.0	NA		

LEGEND:

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GM460

PID RESPONSE FACTORS



PID Response factors for important chemicals are identified in the following table. Chemicals are listed according to their most common name, but the CAS number should be used to more precisely identify each chemical.

Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Pentylcyclopentane	C10H20	3741-00-2	9.91	NA	1.1	NA
Pentyne, 1-	C5H8	627-19-0	10.1	NA	3	NA
Peracetic acid	C2H4O3	79-21-0	~10.5	NA	2.0	ZR
Perfluorobutadiene	C4F6	682-63-2	9.5	NA	3	NA
Perfluoro-tert-butylamine	C4H2F9N	2809-92-9	10.4	NA	5	ZR
Petroleum ether	N/A	8032-32-4	~10	1	0.9	NA
Phellandrene	C10H16	99-83-2	~8.2	NA	0.8	NA
Phenethyl methyl ether, 2-	C9H12O	3558-60-9	~9	NA	0.6	NA
Phenol	C6H6O	108-95-2	8.51	0.9	1.2	1.1
Phenoxyethanol, 2-	C8H10O2	122-99-6	~8.5	6	0.5	10
Phenyl chloroformate	C7H5ClO2	1885-14-9	~9	NA	1.1	NA
Phenyl ethyl isobutyrate, 2-	C12H16O2	103-48-0	~9	NA	1.5	NA
Phenyl propene, 2-	C9H10	98-83-9	8.35	NA	0.4	0.4
Phenyl-2,3-epoxypropyl ether	C9H10O2	122-60-1	~8.6	NA	0.8	NA
Phenylacetaldehyde	C8H8O	122-78-1	8.8	NA	0.7	NA
Phenylacetic acid	C8H8O2	103-82-2	8.26	NA	1.0	NA
Phenylcyclohexane	C12H16	827-52-1	8.1	NA	0.4	NA
Phenylethyl acetate, 1-	C10H12O2	93-92-5	~9	NA	0.7	NA
Phenylethyl alcohol, 2-	C8H10O	60-12-8	~10	NA	1.2	NA
Phosgene	COCl2	75-44-5	11.55	2.1	ZR	ZR
Phosphine	PH3	7803-51-2	9.96	1.4	2.0	NA
Picoline, 3-	C6H7N	108-99-6	9.04	0.73	0.9	0.8
Pine oil	N/A	8002-09-3	~9.5	NA	1	NA
Pinene, α -	C10H16	80-56-8	8.07	0.43	0.27	0.48
Pinene, β -	C10H16	127-91-3	8.1	0.46	0.27	0.59
Piperazine	C4H10N2	110-85-0	8.72	NA	0.8	NA
Piperidine	C5H11N	110-89-4	8.03	NA	0.9	0.8
Piperylene	C5H8	504-60-9	8.6	0.8	0.7	1
Prop-2-yn-1-ol	C3H4O	107-19-7	10.5	0.93	2.9	ZR
Propadiene	C3H4	463-49-0	9.83	NA	1.0	NA
Propan-1-ol	C3H8O	71-23-8	10.2	1.60	4.8	40
Propanamide	C3H7NO2	79-05-0	~9.5	NA	2	NA
Propane	C3H8	74-98-6	11.07	1.8	ZR	ZR
Propane-1,2-diol	C3H8O2	57-55-6	10	NA	3.0	NA
Propanolamine	C3H9NO	156-87-6	~9.5	NA	1.5	NA
Propargyl chloride	C3H3Cl	624-65-7	9.82	0.64	2	ZR
Propen-1-imine, 2-	C3H5N	73311-40-7	9.65	NA	2	NA
Propene	C3H6	115-07-1	9.73	1	1.4	2

LEGEND:

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ZR: Zero Response

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PID RESPONSE FACTORS



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Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Propiolic acid	C3H2O3	471-25-0	10.45	NA	8	ZR
Propionaldehyde	C3H6O	123-38-6	9.95	2	1.7	NA
Propionic acid	C3H6O2	79-09-4	10.44	4	8.0	ZR
Propionitrile	C3H5NO	107-12-0	11.5	5	ZR	ZR
Propoxy-2-propanol, 1-	C6H14O2	1569-01-3	~9.5	0.7	1.1	1.6
Propyl acetate, n-	C5H10O2	109-60-4	10.04	1	2.5	17
Propyl benzene	C9H12	103-65-1	8.72	0.47	0.45	0.55
Propyl butanoate	C7H14O2	105-66-8	~9.6	0.76	2.3	2.7
Propyl formate	C4H8O2	110-74-7	10.54	1.4	10	ZR
Propyl iodide	C3H7I	107-08-4	9.26	NA	1	NA
Propylamine, n-	C3H9N	107-10-8	8.5	NA	1	NA
Propylbenzene (all isomers)	C9H12	74296-31-4	8.7	NA	0.45	NA
Propylene carbonate	C4H6O3	108-32-7	~10.5	2.6	2	ZR
Propylene glycol ethyl ether acetate	C7H14O3	98516-30-4	~9.6	NA	1.2	NA
Propylene oxide	C3H6O	75-56-9	10.22	1.6	2.7	ZR
Propyleneimine	C3H7N	75-55-8	9	1	1.3	NA
Propylnitrate, n-	C3H7NO3	627-13-4	11.07	2	ZR	ZR
Propyne	C5H4	74-99-7	10.36	NA	4	ZR
Pyrazine	C4H4N2	290-37-3	9.29	NA	3	NA
Pyridine	C5H5N	110-86-1	9.25	0.9	0.8	0.87
Pyridinol, 4-	C5H5NO	626-64-2	9.75	NA	3	NA
Pyridylamine, 2-	C5H6N2	504-29-0	8.1	NA	0.8	NA
Pyrrole	C4H5N	C4H5N	109-97-7	0.98	0.6	1.1
Pyrrolidine	C4H9N	C4H9N	123-75-1	1.3	0.4	20
Pyruvaldehyde	C3H4O2	C3H4O2	78-98-8	NA	0.7	NA
Rose oxide, cis-	C10H18O	16409-43-1	~9	NA	0.8	NA
Sec-amyl acetate	C7H14O2	626-38-0	~9.9	NA	2	NA
Sevoflurane	C3H3F7O	28523-86-6	11	2	ZR	ZR
Stibine	SbH3	7803-52-3	9.89	NA	1.5	NA
Styrene	C8H8	100-42-5	8.4	0.5	0.35	0.52
Sulfur dioxide	SO2	7446-09-5	12.3	1.3	ZR	ZR
Terpineol, α-	C10H18O	98-55-5	~9	NA	0.8	NA
Terpinolene	C10H16	586-62-9	8.1	0.70	0.59	0.9
Terpinyl acetate, α-	C12H20O2	80-26-2	~9	NA	1.2	NA
Tert-amyl methyl ether	C6H14O	994-05-8	~9	NA	0.8	NA
Tert-butanol	C4H10O	75-65-0	10.25	1.01	2.6	2.8
Tert-butyl bromide	C4H9Br	507-10-7	9.92	0.64	1.5	1.6
Tert-butyl formate	C5H10O2	762-75-4	10.52	NA	8	ZR

LEGEND:

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PID RESPONSE FACTORS



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Chemical Name	Formula	CAS Number	Ionization Energy, eV	Response Factor		
				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Tetrabromoethane, 1,1,2,2-	C2H2Br4	79-27-6	~10	NA	2.0	NA
Tetracarbonylnickel	NiC4O4	13463-39-3	8.28	NA	1.0	NA
Tetrachloroethane, 1,1,1,2-	C2H2Cl4	630-20-6	11.1	0.6	ZR	ZR
Tetrachloroethane, 1,1,2,2-	C2H2Cl4	79-34-5	11.1	0.2	ZR	ZR
Tetrachloroethylene	C2Cl4	127-18-4	9.326	0.15	0.44	0.33
Tetrachloropyridine, 2,3,5,6-	C5HNCI4	2402-79-1	~9	NA	1.0	NA
Tetraethyl orthosilicate	C8H20O4Si	78-10-4	9.77	1.0	2.0	3
Tetraethyllead	C8H20Pb	78-00-2	11.1	0.2	ZR	ZR
Tetrafluoroethylene	C2F4	116-14-3	10.12	1	15.0	NA
Tetrahydrofuran	C4H8O	109-99-9	9.41	1.4	0.8	2.8
Tetrahydronaphthalene	C10H12	119-64-2	8.46	NA	0.4	NA
Tetrahydropyran	C5H10O	142-68-7	9.25	0.9	3	1.5
Tetrahydrothiophene	C4H8S	110-01-0	8.38	0.46	0.6	0.5
Tetramethyl orthosilicate	C4H12O4Si	681-84-5	~10	NA	2.0	NA
Tetramethyl succinonitrile	C8H12N2	3333-52-6	~9	1	1.0	NA
Tetramethyl succinonitrile	C8H12N2	3333-52-6	~11	1	NA	NA
Tetramethylbenzene (all isomers)	C10H14	95-93-2	8.06	NA	0.3	NA
Tetramethylbutane, 2,2,3,3-	C8H18	594-82-1	9.8	NA	1	NA
Tetramethylgermane	C4H12Ge	865-52-1	9.34	NA	2	NA
Tetramethylguanidine, N,N,N,N'	C5H13N3	80-70-6	8.43	0.8	0.6	NA
Tetramethylsilane	C3H10Si	993-07-0	9.8	NA	2	NA
Thioacetic acid	C2H4OS	507-09-5	10	NA	2	NA
Thiocarbonyl fluoride	CSF2	420-32-6	10.45	NA	6	ZR
Thiocyanogen	C2S2N2	505-14-6	10.5	NA	8	ZR
Thioformaldehyde trimer	C3H6S3	291-21-4	9.35	NA	1.5	NA
Thiophene	C4H4S	110-02-1	8.86	0.53	0.4	0.5
Thiophosgene	CS2Cl	463-71-8	9.61	NA	1	NA
Thymol	C10H14O	89-83-8	~9	NA	0.7	NA
Titanium-n-propoxide	C12H28O4Ti	3087-37-4	~9	NA	3.0	NA
Toluene	C7H8	108-88-3	8.82	0.55	0.5	0.6
Toluene-2,4-diisocyanate	C9H6N2O2	584-84-9	8.82	2	1.6	NA
Toluenesulfonyl chloride, p-	C7H7SO2Cl	98-59-9	~9	NA	3.0	NA
Toluidine, o-	C7H9N	95-53-4	7.4	1	0.5	NA
Tolylaldehyde, p-	C8H8O	104-87-0	9.33	NA	0.8	NA
Triazine, 1,3,5-	C3H3N3	290-87-9	10.01	NA	6	NA
Tributyl phosphate	C12H27O4P	126-73-8	8.91	NA	5.0	NA
Tributylamine	C12H27N	102-82-9	7.4	0.6	1.2	0.6
Trichloro-2-fluoroethane, 1,1,2-	C2H2Cl3F	359-28-4	~11	1	ZR	ZR

LEGEND:

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				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Trichlorobenzene, 1,2,4-	C6H3Cl3	120-82-1	9.04	NA	0.6	0.5
Trichloroethane, 1,1,1-	C2H3Cl3	71-55-6	11	1	ZR	ZR
Trichloroethane, 1,1,2-	C2H3Cl3	79-00-5	11	0.8	ZR	ZR
Trichloroethylene	C2HCl3	79-01-6	9.45	0.5	0.7	0.8
Trichloropropane 1,2,3-	C3H5Cl3	96-18-4	~11	0.64	ZR	ZR
Trichlorotrifluoroethane, 1,1,1-	C2Cl3F3	354-58-5	11.5	2	ZR	ZR
Trichlorotrifluoroethane, 1,1,2-	C2Cl3F3	76-13-1	11.99	2	ZR	ZR
Triethyl phosphate	C6H15O4P	78-40-0	9.79	NA	3.5	NA
Triethyl phosphite	C6H15O3	122-52-1	8.3	NA	1.5	NA
Triethyl silane	C2H6Si	617-86-7	9.5	NA	2	NA
Triethylamine	C6H15N	121-44-8	7.5	0.7	0.9	1.1
Triethylbenzene	C12H18	25340-18-5	~8.3	NA	0.35	NA
Triethylene aluminum	C6H15Al	97-93-8	~10	NA	1.0	NA
Trifluoroethane, 1,1,2-	C2H3F3	430-66-0	12.9	34	ZR	ZR
Trifluoroethanol, 2,2,2-	C2H3F3O	75-89-8	~13	34	ZR	ZR
Trifluoroethene	C2HF2	359-11-5	10.14	NA	5	NA
Trifluoroethyl methyl ether, 2,2,2-	C3H5F3O	460-43-5	10.53	NA	10	ZR
Trifluoriodomethane	CF3I	2314-97-8	10.28	NA	2	NA
Trimethoxymethane	C4H10O3	149-73-5	9.5	0.71	1	10
Trimethoxyvinylsilane	C5H12O3Si	2768-02-7	~9.5	0.53	1	ZR
Trimethylamine	C3H9N	53-50-3	7.82	0.3	0.5	0.5
Trimethylbenzene mixtures	C9H12	25551-13-7	8.41	0.3	0.3	0.3
Trimethylbenzene, 1,3,5-	C9H12	108-67-8	8.39	0.4	0.40	0.5
Trimethylborate	C3H9BO3	121-43-7	10	1	1.00	NA
Trimethylborate	C3H9BO3	121-43-7	10	1	NA	NA
Trimethylcyclohexane, 1,2,4-	C9H18	2234-75-5	9.35	NA	1	NA
Trimethylene oxide	C3H6O	503-30-0	9.65	NA	1.5	NA
Trimethylsilane	C3H10Si	993-07-7	9.9	NA	1	NA
Trioxane	C3H4O3	110-88-3	10.3	NA	2	ZR
Turpentine	C10H16	9005-90-7	~8	NA	0.6	NA
Turpentine oil	C10H16	8006-64-2	~8	1	0.6	0.5
TVOC	-	N/A	~10	1	1.0	1
Undecane	C11H24	1120-21-4	9.56	0.4	0.9	3.1
Vanillin	C8H8O3	121-33-5	~9	NA	1.0	NA
Vinyl acetate	C4H6O2	108-05-2	9.19	1	1.1	1.77
Vinyl bromide	C2H3Br	593-60-2	9.8	NA	1.5	0.9
Vinyl chloride	C2H3Cl	75-01-4	9.99	0.6	2.1	1.9
Vinyl ethyl ether	C4H8O	109-92-2	8.98	0.8	0.6	0.95

LEGEND:

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GM460

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				11.7 eV Lamp	10.6 eV Lamp	10.0 eV Lamp
Vinyl fluoride	C ₂ H ₃ F	75-02-5	10.37	NA	2.0	ZR
Vinyl-2-pyrrolidinone, 1-	C ₆ H ₉ NO	88-12-0	9	2.7	0.9	3.3
Vinylcyclohexene	C ₈ H ₁₂	100-40-3	8.93	0.44	0.7	0.7
Vinylene carbonate	C ₃ H ₂ O ₃	872-36-6	10.08	1.7	1	5
Vinylidene difluoride	C ₂ H ₂ F ₂	75-38-7	10.29	NA	5	NA
Vinylsilane	C ₂ H ₆ Si	7291-09-0	10.1	NA	1.5	NA
Xylene mixed isomers	C ₈ H ₁₀	1330-20-7	8.56	0.49	0.40	0.59
Xylene, m-	C ₈ H ₁₀	108-38-3	8.56	0.46	0.4	0.53
Xylene, o-	C ₈ H ₁₀	95-47-6	8.56	0.52	0.6	0.6
Xylene, p-	C ₈ H ₁₀	106-42-3	8.44	0.51	0.4	0.59
Xylidine, all	C ₈ H ₁₁ N	1300-73-8	7.5	NA	0.7	0.6

LEGEND:

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