Q-TRAK™ XP
INDOOR AIR QUALITY MONITOR
MODEL 7585
RESPONSE FACTORS AND MOLECULAR WEIGHTS FOR TSI® TVOC SENSORS

APPLICATION NOTE TSI-148 (US)

While TSI® Volatile Organic Compound (VOC) probes are calibrated using isobutylene, the probe's Photo Ionization Detectors (PID) are broadband VOC detectors with a response that differs for each VOC compound.

PID lamps can be created with a number of gasses, each of which has different photon energy. TSI®'s PID probes use Krypton gas, which has a photon energy of 10.6 eV that offers a long lamp life and responds to a wide range of gases.

If you know what VOC you are measuring, then the table below will allow you to calculate the real concentration for your specific VOC that responds to a 10.6 eV (Electron Volt) lamp source.

The table includes seven columns:

1. **Gas/ VOC:** The most common name for the VOC.
2. **Formula:** To assist in identifying the VOC and to determine the VOC's molecular weight.
3. **CAS No.:** You can find the VOC using the CAS No.
4. **Response Factor (RF):** Multiply the displayed concentration by the Response Factor to calculate the actual concentration of the VOC. This value dan be programmed into the 7585.
5. **Minimum Detection Level (MDL) PPB:** Also called **Minimum Detectable Quantity (MDQ).** Typical lowest concentration that can be detected. The MDL in this column is for use with the 801408 TVOC-L sensor. Since the 801408 TVOC-L sensor has greater sensitivity than the 801407 TVOC-H sensor, the MDL for the 801408 TVOC-L sensor will be much less than the MDL for the 801407 TVOC-H sensor.
6. **Minimum Detection Level (MDL) PPB:** Also called **Minimum Detectable Quantity (MDQ).** Typical lowest concentration that can be detected. The MDL in this column is for use with the 801407 TVOC-H sensor. Since the 801407 TVOC-H sensor has less sensitivity than the 801408 TVOC-L sensor, the MDL for the 801407 TVOC-H sensor will be much more than the MDL for the 801408 TVOC-L sensor.
7. **Molecular Weight**: The molecular weight of the VOC is used to convert its number concentration (PPM or PPB) to mass concentration (mg/m^3).

VOC Response

Occasionally you will be measuring a mixture of VOCs. If the total concentration is within the linear range of your PID, then it is reasonable to assume that the concentrations are additive without interference between the different VOCs. If you are measuring a combination of VOCs, then accurate measurement of one of these VOCs will be difficult. Without careful data analysis, you will get only a RF averaged measurement. Be cautious when reporting actual VOC concentration if you know that there may be several VOCs present.

NOTICE

TSI® PID sensors cannot measure all VOCs or gases. VOCs that have an electron-volt potential greater than or equal (≥) to 10.6 eV will give no response since they cannot be ionized by the 10.6 eV lamp source. Semi-Volatile Organic Compounds (SVOC) cannot be measured if the vapor pressure is too low (a few ppm at 20°C) to volatize the compound.

Gas/VOC	Formula	CAS no.	Response Factor	MDL (ppb) TVOC-L 801408	MDL (ppb) TVOC-H 801407	Molecular Weight (g/mol)
Acetaldehyde	C2H4O	75-07-0	5.5	25	480	44.05
Acetic acid	C2H4O2	64-19-7	28	180	3615	60.05
Acetic anhydride	C4H6O3	108-24-7	4	20	400	102.1
Acetone	C3H6O	67-64-1	1.17	5	70	58.08
Acrolein	C3H4O	107-02-8	3.2	20	400	56.06
Acrylic Acid	C3H4O2	79-10-7	21	15	275	72.06
Allyl alcohol	C3H6O	107-18-6	2.3	10	200	58.08
Allyl chloride	C3H5Cl	107-05-1	4.5	20	450	76.53
Ammonia	NH3	7664-41-7	8.5	40	850	17.03
Amyl acetate	C7H14O2	628-63-7	1.8	10	180	130.2
Amyl alcohol	C5H12O	71-41-0	2.6	15	320	88.15
Aniline	C6H7N	62-53-3	0.5	3	50	93.13
Anisole	C7H8O	100-66-3	0.59	2	50	108.1
Arsine	AsH3	7784-42-1	2.5	15	250	77.95
Asphalt, petroleum fumes		8052-42-4	1	5	100	
Benzaldehyde	C7H6O	100-52-7	0.7	5	85	106.1
Benzene	C6H6	71-43-2	0.5	3	50	78.11
Benzene thiol	C6H5SH	108-98-5	0.7	4	70	110.2
Benzonitrile	C7H5N	100-47-0	0.7	4	70	103.1
Benzyl alcohol	C7H8O	100-51-6	1	6	125	108.1
Benzyl chloride	C7H7Cl	100-44-7	0.7	3	55	126.6
Benzyl formate	C8H8O2	104-57-4	0.8	5	77	136.1
Biphenyl	C12H10	92-52-4	0.4	2	40	154.2
Bromine	Br2	7726-95-6	15	100	2000	159.8
Bromobenzene	C6H5Br	108-86-1	0.32	4	70	157
Bromoethane	C2H5Br	74-96-4	1.6	25	500	109
Bromoethyl methyl ether, 2-	C3H7OBr	6482-24-2	2.5	15	250	139
Bromoform	CHBr3	75-25-2	2.8	15	280	252.7
Bromopentane, 1-	C5H11Br	110-53-2	1.1			
Bromopropane, 1-	C3H7Br	106-94-5	1.5	7	130	123
But-3-ynal	C4H4O	52844-23-2	1.5			54.09
Butadiene diepoxide, 1,3-	C4H6O2	1464-53-5	4	20	400	86.09

Gas/VOC	Formula	CAS no.	Response Factor	MDL (ppb) TVOC-L 801408	MDL (ppb) TVOC-H 801407	Molecular Weight (g/mol)
Butane, n-	C4H10	106-97-8	40	230	4600	58.12
Butanol, 1-	C4H10O	71-36-3	3.9	20	400	74.12
Butanol, 2-	C4H10O	78-92-2	3			
Buten-3-ol, 1-	C4H8O	598-32-3	1.8	6	115	72.11
Butene, 1-	C4H8	106-98-9	1.5	7	130	56.11
Butoxyethanol, 2-	C6H14O2	111-76-2	1.1	6	110	118.2
Butyl acetate	C6H12O2	123-86-4	2.5	10	240	116.2
Butyl acrylate	C7H12O2	141-32-2	1.5	8	150	128.2
Butyl lactate	C7H14O3	138-22-7	2.5	15	250	146.2
Butyl mercaptan, n-	C4H10S	109-79-5	0.5	3	50	90.19
Butylamine, n-	C4H11N	109-73-9	1	5	100	73.14
Butylamine, sec-	C4H11N	513-49-5	0.9	5	90	73.14
Camphene	C10H16	565-00-4	0.5	2	45	136.2
Carbon disulfide	CS2	75-15-0	1.4	7	140	76.14
Carbon tetrabromide	CBr4	558-13-4	3	15	300	331.6
Carvone, R-	C10H14O	6485-40-1	1.6	5	100	150.2
Chloroethyl methyl ether, 2-	C3H7ClO	627-42-9	2.6	13	250	94.54
Chlorotoluene, o-	C7H7Cl	95-49-8	0.5	2	50	126.6
Chlorotoluene, p-	C7H7Cl	106-43-4	0.4			126.6
Chlorotrifluoroethylene	C2ClF3	79-38-9	1	5	100	116.5
Citral	C10H16O	5392-40-5	1.7	5	100	152.2
Citronellol	C10H20O	26489-01-0	1	5	100	156.3
Cresol, m-	C7H8O	108-39-4	2.2	5	105	108.1
Cresol, o-	C7H8O	95-48-7	1.1	5	105	108.1
Cresol, p-	C7H8O	106-44-5	1.1	5	105	108.1
Crotonaldehyde	C4H6O	4170-30-3	1	5	100	70.09
Cyclohexane	C6H12	110-82-7	1.3	7	130	84.16
Cyclohexanol	C6H12O	108-93-0	1.6	15	300	100.2
Cyclohexanone	C6H10O	108-94-1	1	6	110	98.14
Cyclohexene	C6H10	110-83-8	0.9	5	75	82.15
Cyclohexyl acetate	C8H14O2	622-45-7	1.2			
Cyclohexylamine	C6H13N	108-91-8	1	5	100	99.18
Cyclopentane	C5H10	287-92-3	10	20	400	70.13
Decane, n-	C10H22	124-18-5	1.2	5	100	142.3
Diacetone alcohol	C6H12O2	123-42-2	0.9			116.2
Dibromochloromethane	CHBr2Cl	124-48-1	10	50	1000	208.3
Dibromoethane, 1,2-	C2H4Br2	106-93-4	2	10	200	187.9
Dibutyl hydrogen phosphate	HC8H18PO4	107-66-4	4	20	400	210.2
Dichloro-1-propene, 2,3-	C3H4Cl2	78-88-6	1.4	7	140	111
Dichloroacetylene	C2Cl2	7572-29-4	5	25	500	94.93
Dichlorobenzene, o-	C6H4Cl2	95-50-1	0.5	3	50	147
Dichloroethene, 1,1-	C2H2Cl2	75-35-4	1	5	100	96.94
Dichloroethene, 1,2-	C2H2Cl2	540-59-0	0.4	4	70	96.94
Dichloroethene, cis-1,2-	C2H2Cl2	156-59-2	0.8	4	80	96.94
Dichloromethane	CH2Cl2	75-09-2	70.0			84.93
Dicyclopentadiene	C10H12	77-73-6	0.9	5	90	132.2
Diethyl ether	C4H10O	60-29-7	1.1	4	90	74.12

Gas/VOC	Formula	CAS no.	Response Factor	MDL (ppb) TVOC-L 801408	MDL (ppb) TVOC-H 801407	Molecular Weight (g/mol)
Diethyl maleate	C8H12O4	141-05-9	2	10	200	172.2
Diethyl phthalate	C12H14O4	84-66-2	1	5	100	222.2
Diethyl sulfide	C4H10S	352-93-2	0.6	3	50	90.19
Diethyl sulfone	C4H10O2S	597-35-3	2			
Diethylamine	C4H11N	109-89-7	1.4	5	100	73.14
Diethylaminoethanol, 2-	C6H15ON	100-37-8	2.7	15	270	117.2
Diethylaminopropylamine, 3-	C7H18N2	104-78-9	5	5	100	130.2
Dihydrogen selenide	H2Se	7783-07-5	1	5	100	2.016
Dihydroxybenzene, 1,2-	C6H6O2	120-80-9	1	5	100	110.1
Dihydroxybenzene, 1,3-	C6H6O2	108-46-3	1	5	100	110.1
Diisobutylene	C8H16	107-39-1	0.7	3	60	112.2
Diisopropyl ether	C6H14O	108-20-3	0.92	3	70	102.2
Diisopropylamine	C6H15N	108-18-9	0.7	4	70	101.2
Diketene	C4H4O2	674-82-8	2.2	11	220	84.07
Dimethoxymethane	C3H8O2	109-87-5	2.8	7	140	76.09
Dimethyl disulfide	C2H6S2	624-92-0	0.2	1	23	94.2
Dimethyl ether	C2H6O	115-10-6	1.3	7	130	46.07
Dimethyl phthalate	C10H10O4	131-11-3	1	5	100	194.2
Dimethyl sulfoxide	C2H6OS	67-68-5	20			
Dimethylacetamide N,N-	C4H9NO	127-19-5	1.3	7	130	87.12
Dimethylamine	C2H7N	124-40-3	1.5	7	140	45.08
Dimethylaminoethanol, 2-	C4H11NO	108-01-0	1.5	8	150	89.14
Dimethylaniline, NN-	C8H11N	121-69-7	0.6	3	60	121.2
Dimethylbutyl acetate	C8H16O2	108-84-9	1.6	8	160	144.2
Dimethylethylamine, NN-	C4H11N	598-56-1	1.6	4	80	73.14
Dimethylformamide	C3H7NO	68-12-2	1.3	5	90	73.09
Dimethylhydrazine, 1,1-	C2H8N2	57-14-7	1	5	100	60.1
Dinitrobenzene, m-	C6H4N2O4	99-65-0	3	15	300	168.1
Dinitrobenzene, p-	C6H4N2O4	100-25-4	5	25	500	168.1
Dinonyl phthalate	C26H42O4	84-76-4	1	5	100	418.6
Di-n-propylamine	C6H15N	142-84-7	1.5			
Dioxane, 1,4-	C4H8O2	123-91-1	1.45	8	150	88.11
Dioxolane	C3H6O2	646-06-0	2.7			
Dipentene	C10H16	138-86-3	0.9	5	90	136.2
Diphenyl ether	C12H10O	101-84-8	1.5	4	80	170.2
Disulfur dichloride	S2Cl2	10025-67-9	3	15	300	135
Di-tert-butyl-p-cresol	C11H16O	2409-55-4	1	5	100	164.2
Divinylbenzene	C10H10	1321-74-0	0.4	2	40	130.2
Divinylbenzene, 1,3-	C10H10	108-57-6	0.3			
Dodecane	C12H24	112-40-3	1			
Dodecanol	C12H26O	112-53-8	0.9	5	90	186.3
Epichlorohydrin	C3H5ClO	106-89-8	5	40	800	92.52
Epoxypropyl isopropyl ether, 2,3-	C6H12O2	4016-14-2	1.2	5	110	116.2
Estagole	C10H12O	140-67-0	0.7			
Ethanol	C2H6O	64-17-5	11	45	870	46.07
Ethanolamine	C2H7NO	141-43-5	3	15	300	61.08
Ethoxy-2-methylpropane, 1-	C6H14O	627-02-1	1			

Gas/VOC	Formula	CAS no.	Response Factor	MDL (ppb) TVOC-L 801408	MDL (ppb) TVOC-H 801407	Molecular Weight (g/mol)
Ethoxy-2-propanol, 1-	C5H12O2	1569-02-4	2.4	10	200	102.1
Ethoxy-butane, 2-	C6H14O	19316-73-5	1			
Ethoxyethanol, 2-	C4H10O2	110-80-5	2	150	3000	90.12
Ethoxyethyl acetate, 2-	C6H12O3	111-15-9	3	15	300	132.2
Ethyl acetate	C4H8O2	141-78-6	4.5	20	360	88.11
Ethyl acrylate	C5H8O2	140-88-5	2.3	10	200	100.1
Ethyl butyrate	C6H12O2	105-54-4	1.4	5	100	116.2
Ethyl chloroformate	C3H5O2Cl	541-41-3	80	400	8300	108.5
Ethyl cyanoacrylate	C6H7O2N	7085-85-0	1.5	8	150	125.1
Ethyl decanoate	C12H24O2	110-38-3	1.8	10	180	200.3
Ethyl formate	C3H6O2	109-94-4	35	150	3000	74.08
Ethyl hexanoate	C8H16O2	123-66-0	1.6	15	260	144.2
Ethyl hexanol, 2-	C8H18O	104-76-7	1.5			130.2
Ethyl hexyl acrylate, 2-	C11H20O2	103-11-7	1	5	100	184.3
Ethyl mercaptan	C2H6S	75-08-1	0.6	3	70	62.13
Ethyl octanoate	C10H20O2	106-32-1	2.3	12	230	172.3
Ethylene	C2H4	74-85-1	8	40	800	28.05
Ethylene glycol	C2H6O2	107-21-1	9	100	2000	62.07
Ethylene oxide	C2H4O	75-21-8	15	75	1500	44.05
Ferrocene	C10H10Fe	102-54-5	0.8	4	80	186
Formamide	CH3ON	75-12-7	2	10	200	45.04
Furfural	C5H4O2	98-01-1	0.8	7	140	96.08
Furfuryl alcohol	C5H6O2	98-00-0	2	10	200	98.1
Germane	GeH4	7782-65-2	10	50	1000	76.64
Glutaraldehyde	C5H8O2	111-30-8	0.9	5	90	100.1
Heptan-2-one	C7H14O	110-43-0	0.85	4	70	114.2
Heptan-3-one	C7H14O	106-35-4	0.73	4	75	114.2
Heptane, n-	C7H16	142-82-5	2.2	10	200	100.2
Hexamethyldisilazane,1,1,1,3,3,3-.	C6H18NSi2	999-97-3	1	5	100	161.4
Hexamethyldisiloxane	C6H18OSi2	107-46-0	0.3	1	30	162.4
Hexan-2-one	C6H12O	591-78-6	0.8	4	80	100.2
Hexane, n-	C6H14	110-54-3	3	20	420	86.18
Hexene, 1-	C6H12	592-41-6	0.98	5	90	84.16
Hydrazine	H4N2	302-01-2	3	15	300	32.05
Hydrogen peroxide	H2O2	7722-84-1	4	20	400	34.01
Hydrogen sulfide	H2S	7783-06-4	4			34.08
Hydroquinone	C6H6O2	123-31-9	0.8	4	80	110.1
Hydroxypropyl acrylate, 2-	C6H10O3	999-61-1	1.5	8	150	130.1
Iminodiethanol 2,2'-	C4H11NO2	111-42-2	1.6	8	160	105.1
Indene	C9H8	95-13-6	0.5	2	50	116.2
Iodine	I2	7553-56-2	0.2	1	15	253.8
Iodoform	CHI3	75-47-8	1.5	8	150	393.7
Iodomethane	CH3I	74-88-4	0.4	2	40	141.9
Isoamyl acetate	C7H14O2	123-92-2	1.5	8	160	130.2
Isobutane	C4H10	75-28-5	8	40	800	58.12
Isobutanol	C4H10O	78-83-1	3	20	350	74.12
Isobutyl acetate	C6H12O2	110-19-0	2	10	230	116.2

Gas/VOC	Formula	CAS no.	Response Factor	MDL (ppb) TVOC-L 801408	MDL (ppb) TVOC-H 801407	Molecular Weight (g/mol)
Isobutyl acrylate	C7H12O2	106-63-8	1.2	7	130	128.2
Isobutylene	C4H8	115-11-7	1	5	100	56.11
Isobutyraldehyde	C4H8O	78-84-2	1.2	6	120	72.11
Isodecanol	C10H22O	25339-17-7	0.9	5	90	158.3
Isononanol	C9H20O	3452-97-9	1.5	8	150	144.3
Isooctane	C8H18	540-84-1	1.1	5	100	114.2
Isooctanol	C8H18O	26952-21-6	1.7	9	170	130.2
Isopentane	C5H12	78-78-4	4	30	600	72.15
Isophorone	C9H14O	78-59-1	0.8	4	75	138.2
Isopropanol	C3H8O	67-63-0	4	22	440	60.1
Isopropyl acetate	C5H10O2	108-21-4	2.4	10	220	102.1
Isopropyl chloroformate	C4H7O2Cl	108-23-6	1.6	8	160	122.6
Ketene	C2H2O	463-51-4	3	15	300	42.04
Maleic anhydride	C4H2O3	108-31-6	2	10	200	98.06
Mercaptoacetic acid	C2H4O2S	68-11-1	1	5	100	92.12
Methacrylic acid	C4H6O2	79-41-4	2.3	12	230	86.09
Methacrylonitrile	C4H5N	126-98-7	5	25	500	67.09
Methoxyethanol, 2-	C3H8O2	109-86-4	2.7	15	270	76.09
Methoxyethoxyethanol, 2-	C5H12O3	111-77-3	1.4	7	140	120.1
Methoxymethylethoxy-2- propanol	C7H16O3	34590-94-8	1.3	7	130	148.2
Methoxypropan-2-ol, 1-	C4H10O2	107-98-2	1.6	15	300	90.12
Methoxypropane, 2-	C4H10O	598-53-8	1.2			
Methoxypropyl acetate	C6H12O3	108-65-6	1.6	6	120	132.2
Methyl acetate	C3H6O2	79-20-9	7	25	500	74.08
Methyl acetoacetate	C5H8O3	105-45-3	3			
Methyl acrylate	C4H6O2	96-33-3	3.6	17	340	86.09
Methyl bromide	CH3Br	74-83-9	1.9	10	190	94.94
Methyl ethyl ketone	C4H8O	78-93-3	0.96	4	80	72.11
Methyl ethyl ketone peroxides	C8H18O6	1338-23-4	0.8	4	80	146.2
Methyl isobutyl ketone	C6H12O	108-10-1	0.9	4	80	100.2
Methyl isothiocyanate	C2H3NS	556-61-6	0.6	3	60	73.12
Methyl mercaptan	CH4S	74-93-1	0.7	4	70	48.11
Methyl methacrylate	C5H8O2	80-62-6	1.31	8	160	100.1
Methyl salicylate	C8H8O3	119-36-8	0.8	6	120	152.1
Methyl sulfide	C2H6S	75-18-3	0.8	3	50	62.13
Methyl tert-butyl ether	C5H12O	1634-04-4	1	4	80	88.15
Methyl-2-propen-1-ol, 2-	C4H8O	513-42-8	1.3	5	100	72.11
Methyl-2-pyrrolidinone, N-	C5H9NO	872-50-4	0.9	5	90	99.13
Methyl-4,6-dinitrophenol, 2-	C7H6N2O5	534-52-1	3	15	300	198.1
Methyl-5-hepten-2-one, 6-	C8H14O	110-93-0	0.63	4	80	126.2
Methylamine	CH5N	74-89-5	1.5	7	140	31.06
Methylbutan-1-ol, 3-	C5H12O	123-51-3	2.3	17	340	88.15
Methylcyclohexane	C7H14	108-87-2	1.1	6	110	98.19
Methylcyclohexanol, 4-	C7H14O	589-91-3	2.4	12	240	114.2
Methylcyclohexanone, 2-	C7H12O	583-60-8	1	5	100	112.2
Methylheptan-3-one, 5-	C8H16O	541-85-5	0.77	4	75	128.2
Methylhexan-2-one, 5-	C7H14O	110-12-3	0.7	4	75	114.2

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Methylhydrazine	CH6N2	60-34-4	1.3	7	130	46.07
Methyl-N-2,4, 6-tetranitroaniline, N-	C7H5N5O8	479-45-8	3	15	300	287.1
Methylpent-3-en-2-one, 4-	C6H10O	141-79-7	0.6	4	70	98.14
Methylpentan-2-ol, 4-	C6H14O	108-11-2	1.4	14	280	102.2
Methylpentane-2,4-diol, 2-	C6H14O2	107-41-5	4	20	400	118.2
Methylstyrene	C9H10	25013-15-4	0.5	3	50	118.2
Naphthalene	C10H8	91-20-3	0.4	2	45	128.2
Nitric oxide	NO	10102-43-9	8	40	800	30.01
Nitroaniline 4-	C6H6N2O2	100-01-6	0.8	4	80	138.1
Nitrobenzene	C6H5NO2	98-95-3	1.7	10	170	123.1
Nitrogen dioxide	NO2	10102-44-0	10	50	1000	46.01
Nitrogen trichloride	NCl3	10025-85-1	1	5	100	120.4
Nonane	C9H20	111-84-2	1.4	6	130	128.3
Norbornadiene, 2,5-	C7H8	121-46-0	0.6	3	60	92.14
Octachloronaphthalene	C10Cl8	2234-13-1	1	5	100	403.7
Octane	C8H18	111-65-9	1.6	8	160	114.2
Octene, 1-	C8H16	111-66-0	0.7	3	70	112.2
Oxydiethanol, 2,2-	C4H10O3	111-46-6	2	20	400	106.1
Pentacarbonyl iron	FeC5O5	13463-40-6	1	5	100	195.9
Pentan-2-one	C5H10O	107-87-9	0.99	4	80	86.13
Pentan-3-one	C5H10O	96-22-0	0.77	4	80	86.13
Pentanal	C5H10O	110-62-3	1.5			
Pentandione, 2,4-	C5H8O2	123-54-6	1.2	4	75	100.1
Pentane	C5H12	109-66-0	7	40	800	72.15
Peracetic acid	C2H4O3	79-21-0	2	10	200	76.05
Phenol	C6H6O	108-95-2	1.2	6	120	94.11
Phenyl propene, 2-	C9H10	98-83-9	0.4	2	45	118.2
Phenyl-2,3-epoxypropyl ether	C9H10O2	122-60-1	0.8	4	80	150.2
Phenylenediamine, p-	C6H8N2	106-50-3	0.6	3	60	108.1
Phosphine	PH3	7803-51-2	2	10	200	34
Picoline, 3-	C6H7N	108-99-6	0.7	5	90	93.13
Piperidine	C5H11N	110-89-4	1	5	90	85.15
Piperylene	C5H8	504-60-9	0.9	3	67	68.12
Prop-2-yn-1-ol	C3H4O	107-19-7	3.7	7	130	56.06
Propan-1-ol	C3H8O	71-23-8	5.4	25	480	60.1
Propanamide	C3H7NO	79-05-0	2			
Propane-1,2-diol	C3H8O2	57-55-6	3	50	1000	76.09
Propanolamine	C3H9NO	156-87-6	1.5			
Propene	C3H6	115-07-1	1.4	7	140	42.08
Propionaldehyde	C3H6O	123-38-6	1.7	8	169	58.08
Propionic acid	C3H6O2	79-09-4	8	40	800	74.08
Propyl acetate, n-	C5H10O2	109-60-4	3	13	250	102.1
Propylene oxide	C3H6O	75-56-9	6	35	700	58.08
Propyleneimine	C3H7N	75-55-8	1.4	7	130	57.1
Pyridine	C5H5N	110-86-1	0.7	4	75	79.1
Pyridylamine, 2-	C5H6N2	504-29-0	0.8	4	80	94.12
Styrene	C8H8	100-42-5	0.45	2	50	104.2

Gas/VOC	Formula	CAS no.	Response Factor	MDL (ppb) TVOC-L 801408	MDL (ppb) TVOC-H 801407	Molecular Weight (g/mol)
Terphenyl, p-	C18H14	92-94-4	0.6	3	60	230.3
Terpinolene	C10H16	586-62-9	0.6	2	50	136.2
Tert-butanol	C4H10O	75-65-0	1.6	15	260	74.12
Tetrabromoethane, 1,1,2,2-	C2H2Br4	79-27-6	2	10	200	345.7
Tetracarbonylnickel	NiC4O4	13463-39-3	1	5	100	170.7
Tetrachloroethylene	C2Cl4	127-18-4	0.4	4	70	165.8
Tetrachloronaphthalene, 1,2,3,4-	C10H4Cl4	20020-02-4	1	5	100	266
Tetrachloropyridine, 2,3,5,6-	C5HNCl4	2402-79-1	1			
Tetraethyl orthosilicate	C8H20O4Si	78-10-4	3	10	200	208.3
Tetraethylenepentamine	C8H23N5	112-57-2	0.6			
Tetrafluoroethylene	C2F4	116-14-3	15	5	100	100
Tetrahydrofuran	C4H8O	109-99-9	2.3	8	150	72.11
Tetramethyl succinonitrile	C8H12N2	3333-52-6	1	5	100	136.2
Toluene	C7H8	108-88-3	0.56	3	50	92.14
Toluene-2,4-diisocyanate	C9H6N2O2	584-84-9	1.6	8	160	174.2
Toluenesulfonyl chloride, p-	C7H7SO2Cl	98-59-9	3	15	300	190.6
Toluidine, o-	C7H9N	95-53-4	0.5	3	50	107.2
Tributyl phosphate	C12H27O4P	126-73-8	5	25	500	266.3
Tributylamine	C12H27N	102-82-9	1.3	5	100	185.4
Trichlorobenzene, 1,2,4-	C6H3Cl3	120-82-1	0.6	3	50	181.4
Trichloroethylene	C2HCl3	79-01-6	0.6	3	65	131.4
Trichlorophenoxyacetic acid, 2,4,5-	C8H5O3Cl3	93-76-5	1	5	100	255.5
Triethylamine	C6H15N	121-44-8	1.3	5	90	101.2
Trimethylamine	C3H9N	75-50-3	0.5	3	50	59.11
Trimethylbenzene, 1,3,5-	C9H12	108-67-8	0.4	2	30	120.2
Turpentine oil	C10H16	8006-64-2	0.6	3	60	136.2
Undecane	C11H24	1120-21-4	1.1	5	100	156.3
Vinyl acetate	C4H6O2	108-05-4	1.5	6	110	86.09
Vinyl bromide	C2H3Br	593-60-2	1.5	5	100	106.9
Vinyl chloride	C2H3Cl	75-01-4	2.1	10	200	62.5
Vinyl-2-pyrrolidinone, 1-	C6H9NO	88-12-0	4.5	5	90	111.1
Xylene mixed isomers	C8H10	1330-20-7	0.54	2	40	106.2
Xylene, m-	C8H10	108-38-3	0.5	2	50	106.2
Xylene, o-	C8H10	95-47-6	0.5	3	60	106.2
Xylene, p-	C8H10	106-42-3	0.55	3	50	106.2
Xylidine, all	C8H11N	1300-73-8	0.7	4	70	121.2

References

Alphasense (www.alphasense.com) Application Note AAN 305-06

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