NANOVA Environmental Inc.

NovaTest™ P100 VOC Library

TVOC					
The information listed in TVOC is for calibration gas only.					
No.	**Calibration gas**	**CAS #**	**Mw (Molecular weight)**	**IP (Ionization potential)**	**RF (Response factor)**
1	Isobutylene	115-11-7	56.106	9.4	1

BTEX (6 gases)					
No.	**VOC**	**CAS#**	**Mw (Molecular weight)**	**IP (Ionization potential)**	**RF (Response factor)**
1	Benzene	71-43-2	78.11	9.25	0.53
2	Ethylbenzene	100-41-4	106.17	8.76	0.51
3	M-xylene	108-38-3	106.16	8.56	0.53
4	O-xylene	95-47-6	106.16	8.56	0.54
5	P-xylene	106-42-3	106.16	8.45	0.5
6	Toluene	108-88-3	92.14	8.82	0.53

Air Quality (26 gases)					
No.	VOC	CAS#	Mw (Molecular weight)	IP (Ionization potential)	RF (Response factor)
1	1,1,2,2-Tetrachloroethane	79-34-5	167.848	9.33	0.44
2	1,1-Dichloroethene	75-35-4	96.94	9.6	0.8
3	1,2,4-Trichlorobenzene	120-82-1	181.45	9.04	0.46
4	1,2,4-Trimethylbenzene	95-63-6	120.19	8.27	0.47
5	1,2-Dibromoethane	106-93-4	187.86	10.19	11.7
6	1,2-Dichlorobenzene	95-50-1	147.01	9.07	0.5
7	1,3,5-Trimethylbenzene	108-67-8	120.19	8.39	0.34
8	1,3-Dichlorobenzene	541-73-1	147	9.12	0.5
9	1,4-Dichlorobenzene	106-46-7	147	8.94	0.5
10	4-Ethyltoluene	622-96-8	120.2	8.19	0.5
11	Allyl chloride	107-05-1	76.52	10.2	4.3
12	Benzene	71-43-2	78.11	9.25	0.53
13	Benzyl chloride	100-44-7	126.58	10.16	0.6
14	Chlorobenzene	108-90-7	112.56	9.07	0.4
15	Cis-1,2-Dichloroethene	156-59-2	96.95	9.66	0.8
16	Cis-1,3-Dichloropropene	542-75-6	110.97	<10	0.96
17	Ethylbenzene	100-41-4	106.17	8.76	0.51
18	Methylene chloride	75-09-2	84.93	11.32	39
19	M-Xylene	108-38-3	106.16	8.56	0.53
20	O-Xylene	95-47-6	106.16	8.56	0.54
21	P-Xylene	106-42-3	106.16	8.45	0.5
22	Perchloroethylene	127-18-14	165.82	9.32	0.56
23	Styrene	100-42-5	104.15	8.47	0.4
24	Toluene	108-88-3	92.14	8.82	0.53
25	Trans-1,3-Dichloropropene	542-75-6	110.97	-	-
26	Trichloroethylene	79-01-6	131.4	9.45	0.5

Malodorous Gas (8 gases)					
No.	VOC	CAS#	Mw (Molecular weight)	IP (Ionization potential)	RF (Response factor)
1	Ammonia	7664-41-7	17.031	10.15	9.4
2	Carbon disulfide	75-15-0	76.13	10.07	1.2
3	Dimethyl disulfide	624-92-0	94.19	8.46	0.3
4	Dimethyl sulfide	75-18-3	62.13	8.7	0.5
5	Hydrogen sulfide	7783-06-4	34.08	10.46	4
6	Methanethiol	74-93-1	48.11	9.44	0.6
7	Styrene	100-42-5	104.15	8.47	0.4
8	Trimethylamine	75-50-3	59.11	7.82	0.83

MTBE (1 gas)					
No.	VOC	CAS#	Mw (Molecular weight)	IP (Ionization potential)	RF (Response factor)
1	Methyl tert-butyl ether	1634-04-4	88.15	10	0.86

Pollution Source (22 gases)					
No.	VOC	CAS#	Mw (Molecular weight)	IP (Ionization potential)	RF (Response factor)
1	1-decene	872-05-9	140.27	9.42	-
2	2-heptanone	110-43-0	114.18	9.33	0.7
3	2-nonanone	821-55-6	142.242	9.32	1.3
4	3-pentanone	96-22-0	86.13	9.32	0.8
5	Acetone	67-64-1	58.08	9.69	1.2
6	Anisole	100-66-3	108.14	8.2	0.5
7	Benzaldehyde	100-52-7	106.12	9.53	0.9
8	Benzene	71-43-2	78.11	9.25	0.53
9	Butyl acetate	123-86-4	116.16	10.01	2.4
10	Cyclopentanone	120-92-3	84.12	9.26	0.7
11	Ethyl acetate	141-78-6	88.11	10.01	4.2
12	Ethylbenzene	100-41-4	106.17	8.76	0.51
13	Heptane	142-82-5	100.21	10.07	2.5
14	Hexamethyldisiloxane	107-46-0	162.38	9.59/9.88	0.3
15	Hexane	110-54-3	86.18	10.18	4.2
16	Isopropanol	67-63-0	60.1	10.16	5.6
17	Methoxy-2-propyl acetate	108-65-6	132.159	9	1.2
18	M-xylene	108-38-3	106.16	8.56	0.53
19	O-xylenes	95-47-6	106.16	8.56	0.54
20	P-xylene	106-42-3	106.16	8.45	0.5
21	Styrene	100-42-5	104.15	8.47	0.4
22	Toluene	108-88-3	92.14	8.82	0.53

PCE-TCE (2 gases)					
No.	VOC	CAS#	Mw (Molecular weight)	IP (Ionization potential)	RF (Response factor)
1	Perchloroethylene	127-18-14	165.82	9.32	0.56
2	Trichloroethylene	79-01-6	131.4	9.45	0.5

Vehicle (9 gases)					
No.	VOC	CAS#	Mw (Molecular weight)	IP (Ionization potential)	RF (Response factor)
1	Acetaldehyde	75-07-0	44.05	10.21	10.8
2	Acrolein	107-02-8	56.06	10.1	3.9
3	Benzene	71-43-2	78.11	9.25	0.53
4	Ethylbenzene	100-41-4	106.17	8.76	0.51
5	Styrene	100-42-5	104.15	8.47	0.4
6	Toluene	108-88-3	92.14	8.82	0.53
7	M-xylene	108-38-3	106.16	8.56	0.53
8	O-xylene	95-47-6	106.16	8.56	0.54
9	P-xylene	106-42-3	106.16	8.45	0.5

Water Quality (16 gases)					
No.	VOC	CAS#	Mw (Molecular weight)	IP (Ionization potential)	RF (Response factor)
1	1,2-Dichlorobenzene	95-50-1	147.01	9.07	0.5
2	1,4-Dichlorobenzene	106-46-7	147	8.94	0.5
3	Benzene	71-43-2	78.11	9.25	0.53
4	Chlorobenzene	108-90-7	112.56	9.07	0.36
5	Cris-1,2-Dichloroethylene	156-59-2	96.95	9.66	0.8
6	Dichloromethane	75-09-2	84.93	11.32	39
7	Ethylbenzene	100-41-4	106.17	8.76	0.51
8	Isopropylbenzene	98-82-8	120.2	8.75	0.54
9	M-xylene	108-38-3	106.16	8.56	0.53
10	O-xylenes	95-47-6	106.16	8.56	0.54
11	P-xylene	106-42-3	106.16	8.45	0.5
12	Perchloroethylene	127-18-14	165.82	9.32	0.56
13	Styrene	100-42-5	104.15	8.47	0.4
14	Toluene	108-88-3	92.14	8.82	0.53
15	Trans-1,2-Dichloroethylene	156-60-5	96.95	9.65	0.45
16	Trichloroethylene	79-01-6	131.4	9.45	0.5