

# GAS LIBRARY AND SENSOR OPTIONS

Compound Name	Formula	CAS No.	TWA* (ppm)	b.p. (°C)	PID CF		mPower Instrument & Sensor				
					10.6 eV	NEO	POLI	MUNI	UNI	UNI 321	
Acetaldehyde	C <sub>2</sub> H <sub>4</sub> O	75-07-0	C25	21	6	PID	PID/LEL/C <sub>2</sub> H <sub>4</sub> O	LEL	C <sub>2</sub> H <sub>4</sub> O		
Acetic Acid	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	64-19-7	10	118	22	PID	PID/LEL	LEL			
Acetone	C <sub>3</sub> H <sub>6</sub> O	67-64-1	250	56	1.1	PID	PID/LEL	LEL			
Acetylene	C <sub>2</sub> H <sub>2</sub>	74-86-2	NA	-84	NR		LEL	LEL			
Acrolein	C <sub>3</sub> H <sub>4</sub> O	107-02-8	0.1	53	3.9	PID	PID/LEL	LEL			
Acrylic Acid	C <sub>3</sub> H <sub>4</sub> O <sub>2</sub>	79-10-7	2	141	12	PID	PID				
Ammonia	NH <sub>3</sub>	7664-41-7	25	-33	9.7	PID	PID/LEL/NH <sub>3</sub>	LEL	NH <sub>3</sub>		
Aniline	C <sub>7</sub> H <sub>7</sub> N	62-53-3	2	184	0.48	PID					
Arsine	AsH <sub>3</sub>	7784-42-1	0.005	-63	1.9	PID	PID				
Benzene	C <sub>6</sub> H <sub>6</sub>	71-43-2	0.5	80	0.53	PID	PID/LEL	LEL			
Benzyl Alcohol	C <sub>7</sub> H <sub>8</sub> O	100-51-6	10	205	1.1	PID					
Bromine	Br <sub>2</sub>	7726-95-3	0.1	59	1.3	PID	PID				
Bromoform	CHBr <sub>3</sub>	75-25-2	0.5	149	2.5	PID	PID				
Bromopropane, 1-	C <sub>3</sub> H <sub>7</sub> Br	106-94-5	10	71	1.5	PID	PID				
Butadiene	C <sub>4</sub> H <sub>6</sub>	106-99-0	2	-4	0.85	PID	PID/LEL	LEL			
Butane, n-	C <sub>4</sub> H <sub>10</sub>	106-97-8	1000	-1	NR		LEL	LEL			
Butanol, 1-	C <sub>4</sub> H <sub>10</sub> O	71-36-3	20	118	4.7	PID	PID/LEL	LEL			
Butanol, t-	C <sub>4</sub> H <sub>10</sub> O	75-65-0	100	82	2.9	PID	PID/LEL	LEL			
Butoxyethanol, 2-	C <sub>6</sub> H <sub>14</sub> O <sub>2</sub>	111-76-2	20	171	1.2	PID	PID				
Butyl Acetate, n-	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	123-86-4	150	126	2.6	PID	PID/LEL	LEL			
Butyl Acrylate, n-	C <sub>7</sub> H <sub>12</sub> O <sub>2</sub>	141-32-2	2	145	1.6	PID	PID/LEL	LEL			
Butylamine, n-	C <sub>4</sub> H <sub>11</sub> N	109-73-9	C5	78	1.1	PID	PID				
Carbon Dioxide	CO <sub>2</sub>	124-38-9	5000	-79	NR		CO <sub>2</sub>				
Carbon Disulfide	CS <sub>2</sub>	75-15-0	1	46	1.2	PID	PID				
Carbon Monoxide	CO	630-08-0	25	-192	NR		CO	CO	CO	CO	
Chlorine	Cl <sub>2</sub>	7782-50-5	0.1	-34	NR		Cl <sub>2</sub>		Cl <sub>2</sub>		

Chlorine Dioxide	ClO <sub>2</sub>	10049-04-4	C0.1	10	NR		ClO <sub>2</sub>		ClO <sub>2</sub>
Chlorobenzene	C <sub>6</sub> H <sub>5</sub> Cl	108-90-7	10	131	0.4	PID	PID		
Cresol, m-	C <sub>7</sub> H <sub>8</sub> O	108-39-4	5	202	0.5	PID			
Cumene	C <sub>9</sub> H <sub>12</sub>	98-82-8	50	152	0.54	PID	PID		
Cyclohexane	C <sub>6</sub> H <sub>12</sub>	110-82-7	100	81	1.4	PID	PID/LEL	LEL	
Cyclohexanone	C <sub>6</sub> H <sub>10</sub> O	108-94-1	20	156	0.9	PID	PID/LEL		
Decane	C <sub>10</sub> H <sub>22</sub>	124-18-5	NA	174	1.4	PID	PID		
Dibromo-3-chloropropane, 1, 2-	C <sub>3</sub> H <sub>5</sub> Br <sub>2</sub> Cl	96-12-8	0.001	198	1.7	PID			
Dibromoethane, 1, 2-	C <sub>2</sub> H <sub>4</sub> Br <sub>2</sub>	106-93-4	0.045	131	1.7	PID	PID		
Dichlorobenzene, o-	C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub>	95-50-1	25	180	0.47	PID			
Dichloroethene, 1, 1-	C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	75-35-4	5	32	0.82	PID	PID		
Dichloroethene, t-1, 2-	C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	156-60-5	200	49	0.45	PID	PID		
Dicyclopentadiene	C <sub>10</sub> H <sub>12</sub>	77-73-6	5	170	0.48	PID	PID		
Diesel Fuel #2	-----	68334-30-5	14	200-350	0.7	PID			
Dimethylformamide, N, N-	C <sub>3</sub> H <sub>7</sub> NO	68-12-2	5	153	0.7	PID	PID		
Dimethylhydrazine, 1, 1-	C <sub>2</sub> H <sub>8</sub> N <sub>2</sub>	57-14-7	0.01	63	0.78	PID			
Epichlorohydrin	C <sub>3</sub> H <sub>5</sub> ClO	106-89-8	0.5	118	8.5	PID	PID/LEL	LEL	
Ethane	C <sub>2</sub> H <sub>6</sub>	74-84-0	1000	-89	NR		LEL	LEL	
Ethanol	C <sub>2</sub> H <sub>6</sub> O	64-17-5	1000	78	10	PID	PID/ETO/LEL	LEL	ETO
Ethylene (Ethene)	C <sub>2</sub> H <sub>4</sub>	74-85-1	200	-128	9	PID	PID/LEL	LEL	
Ethyl Acetate	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	141-78-6	400	77	4.3	PID	PID/LEL	LEL	
Ethyl Acrylate	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	140-88-5	5	99	2.4	PID	PID/LEL	LEL	
Ethyl Ether	C <sub>4</sub> H <sub>10</sub> O	60-29-7	400	35	1.1	PID	PID/LEL	LEL	
Ethyl Mercaptan	C <sub>2</sub> H <sub>6</sub> S	75-08-1	0.5	35	0.56	PID	PID/CH <sub>3</sub> SH		CH <sub>3</sub> SH
Ethylbenzene	C <sub>8</sub> H <sub>10</sub>	100-41-4	20	136	0.52	PID	PID		
Ethylene Glycol	C <sub>2</sub> H <sub>6</sub> O <sub>2</sub>	107-21-1	MAK 10	197	16	PID			
Ethylene Oxide	C <sub>2</sub> H <sub>4</sub> O	75-21-8	1	11	13	PID	PID/LEL/ETO	LEL	ETO
Formic Acid	CH <sub>2</sub> O <sub>2</sub>	64-18-6	5	101	NR				ETO
Gasoline	-----	8006-61-9	300	35-200	1	PID	PID/LEL	LEL	
Glutaraldehyde	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	111-30-8	C0.05	187	0.8	PID	PID		
Heptane,n-	C <sub>7</sub> H <sub>16</sub>	142-82-5	400	98	2.8	PID	PID/LEL	LEL	

Hexane,n-	C <sub>6</sub> H <sub>14</sub>	110-54-3	50	68	4.3	PID	PID/LEL	LEL		
Hexanol,1-	C <sub>6</sub> H <sub>14</sub> O	111-27-3	NA	157	2.5	PID	PID/LEL	LEL		
Hydrazine	H <sub>4</sub> N <sub>2</sub>	302-01-2	0.01	114	3	PID				
Hydrogen	H <sub>2</sub>	1333-74-0	Asphyxiant	-253	NR		H <sub>2</sub>	CO	H <sub>2</sub>	
Hydrogen Chloride	HCl	7647-01-0	C2	-85	NR		HCl		HCl	
Hydrogen Cyanide	HCN	74-90-8	C4.7	26	NR		HCN	HCN	HCN	
Hydrogen Fluoride	HF	7664-39-3	0.5	20	NR		HF		HF	
Hydrogen Iodide	HI	10034-85-2	NA	-35	0.6	PID	PID			
Hydrogen Sulfide	H <sub>2</sub> S	7783-06-4	1	-60	3.3	PID	PID/H <sub>2</sub> S	H <sub>2</sub> S	H <sub>2</sub> S	H <sub>2</sub> S
Iodine	I <sub>2</sub>	7553-56-2	0.01	184	0.1	PID	PID			
Iodomethane	CH <sub>3</sub> I	74-88-4	2	42	0.22	PID	PID			
Isobutane	C <sub>4</sub> H <sub>10</sub>	75-28-5	1000	-12	NR		LEL	LEL		
Isobutanol	C <sub>4</sub> H <sub>10</sub> O	78-83-1	50	108	3.8	PID	PID/LEL	LEL		
Isobutylene	C <sub>4</sub> H <sub>8</sub>	115-11-7	250	-7	1	PID	PID/LEL	LEL	ETO	
Isoprene	C <sub>5</sub> H <sub>8</sub>	78-79-5	2	34	0.63	PID	PID/LEL	LEL		
Isopropanol	C <sub>3</sub> H <sub>8</sub> O	67-63-0	200	83	6	PID	PID/LEL	LEL		
Jet fuel JP-4	-----	-----	NA	70-240	1	PID	PID			
Jet fuel JP-5	-----	-----	29	180-270	0.6	PID	PID			
Jet fuel JP-8	-----	-----	30	170-270	0.6	PID	PID			
Limonene,D-	C <sub>10</sub> H <sub>16</sub>	5989-27-5	30	176	0.33	PID	PID			
Mesitylene	C <sub>9</sub> H <sub>12</sub>	108-67-8	25	165	0.35	PID	PID			
Methane	CH <sub>4</sub>	74-82-8	1000	-162	NR		LEL	LEL		
Methanol	CH <sub>4</sub> O	67-56-1	200	65	NR		ETO/LEL	LEL	ETO	
Methoxyethoxyethanol,2-	C <sub>7</sub> H <sub>16</sub> O <sub>3</sub>	111-77-3	NA	194	1.2	PID	PID			
Methyl Acetate	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	79-20-9	200	57	6.6	PID	PID/LEL	LEL		
Methyl Bromide	CH <sub>3</sub> Br	74-83-9	1	4	1.7	PID	PID			
Methyl Ether	C <sub>2</sub> H <sub>6</sub> O	115-10-6	1000	-24	3.1	PID	PID/LEL	LEL		
Methyl Ethyl Ketone	C <sub>4</sub> H <sub>8</sub> O	78-93-3	200	80	0.86	PID	PID/LEL	LEL		
Methyl Isobutyl Ketone	C <sub>6</sub> H <sub>12</sub> O	108-10-1	20	117	0.8	PID	PID/LEL	LEL		
Methyl Isocyanate	C <sub>2</sub> H <sub>3</sub> NO	624-83-9	0.02	40	4.6	PID	PID/LEL	LEL		
Methyl Isothiocyanate	C <sub>2</sub> H <sub>3</sub> NS	551-61-6	IDLH 3	119	0.45	PID	PID			

Methyl Mercaptan	CH <sub>3</sub> SH	74-93-1	0.5	6	0.54	PID	PID/CH <sub>3</sub> SH		CH <sub>3</sub> SH
Methyl Methacrylate	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	80-62-6	50	101	1.5	PID	PID		
Methyl Sulfide	C <sub>2</sub> H <sub>6</sub> S	75-18-3	10	37	0.44	PID	PID		
Methyl t-Butyl Ether	C <sub>5</sub> H <sub>12</sub> O	1634-04-4	50	55	0.91	PID	PID/LEL	LEL	
Methyl-2-Pyrrolidinone,N-	C <sub>5</sub> H <sub>9</sub> NO	872-50-4	10	202	0.8	PID	PID		
Methylhydrazine	C <sub>2</sub> H <sub>6</sub> N <sub>2</sub>	60-34-4	0.01	87	1.2	PID	PID		
Mineral spirits	-----	8020-83-5	100	130-200	0.71	PID	PID		
Naphthalene	C <sub>10</sub> H <sub>8</sub>	91-20-3	10	218	0.42	PID	PID		
Nitric Oxide	NO	10102-43-9	25	-152	5.2	PID	PID/NO		NO
Nitrogen Dioxide	NO <sub>2</sub>	10102-44-0	0.2	21	16	PID	NO <sub>2</sub>		NO <sub>2</sub>
Octane,n-	C <sub>8</sub> H <sub>18</sub>	111-65-9	300	125	1.8	PID	PID/LEL	LEL	
Oxygen	O <sub>2</sub>	7782-44-7	NA	-186	NR		O <sub>2</sub>	O <sub>2</sub>	O <sub>2</sub>
Ozone	O <sub>3</sub>	10028-15-6	0.05	-112	NR				O <sub>3</sub>
Pentane	C <sub>5</sub> H <sub>12</sub>	109-66-0	1000	36	8.4	PID	PID/LEL	LEL	
Perchloroethene	C <sub>2</sub> Cl <sub>4</sub>	127-18-4	25	121	0.57	PID	PID		
PGMEA	C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>	108-65-6	50	146	1	PID	PID		
Phenol	C <sub>6</sub> H <sub>6</sub> O	108-95-2	5	182	1	PID	PID		
Phosphine	PH <sub>3</sub>	7803-51-2	0.05	-88	3.9	PID	PID/PH <sub>3</sub> /LEL	LEL	PH <sub>3</sub>
Pinene,b-	C <sub>10</sub> H <sub>16</sub>	18172-67-3	20	166	0.37	PID	PID		
Piperylene, Isomer Mix	C <sub>5</sub> H <sub>8</sub>	504-60-9	NA	43	0.69	PID	PID		
Propane	C <sub>3</sub> H <sub>8</sub>	74-98-6	1000	-42	NR		LEL	LEL	
Propene	C <sub>3</sub> H <sub>6</sub>	115-07-1	500	-48	1.4	PID	PID/LEL	LEL	
Propylene Oxide	C <sub>3</sub> H <sub>6</sub> O	16088-62-3	2	34	6.6	PID	PID/LEL	LEL	
Pyridine	C <sub>5</sub> H <sub>5</sub> N	110-86-1	1	115	0.68	PID	PID		
Styrene	C <sub>8</sub> H <sub>8</sub>	100-42-5	20	145	0.4	PID	PID		
Sulfur Dioxide	SO <sub>2</sub>	7446-09-5	STEL 0.25	-10	NR		SO <sub>2</sub>	SO <sub>2</sub>	SO <sub>2</sub>
Tetrahydrofuran	C <sub>4</sub> H <sub>8</sub> O	109-99-9	50	66	1.7	PID	PID/LEL	LEL	
Tetramethyl Orthosilicate	C <sub>4</sub> H <sub>12</sub> O <sub>4</sub> Si	681-84-5	1	121	1.9	PID			
Therminol VP-1	C <sub>12</sub> H <sub>10</sub> O & C <sub>12</sub> H <sub>10</sub>	101-84-8 & 92-52-4	1	257	0.4	PID			
Toluene	C <sub>7</sub> H <sub>8</sub>	108-88-3	20	111	0.5	PID	PID/LEL	LEL	

Toluene-2,4-Diisocyanate	C <sub>9</sub> H <sub>6</sub> N <sub>2</sub> O <sub>2</sub>	584-84-9	0.001	251	1.4	PID			
Trichloroethene	C <sub>2</sub> HCl <sub>3</sub>	79-01-6	10	87	0.54	PID	PID		
Triethylamine	C <sub>6</sub> H <sub>15</sub> N	121-44-8	0.5	89	0.9	PID	PID		
Turpentine	C <sub>10</sub> H <sub>16</sub>	8006-64-2	20	90-115	0.3	PID	PID		
Vinyl Chloride	C <sub>2</sub> H <sub>3</sub> Cl	75-01-4	1	-13	2	PID	PID/ETO/LEL	LEL	ETO
Vinyl-1-Cyclohexene,4-	C <sub>8</sub> H <sub>12</sub>	100-40-3	0.1	129	0.56	PID	PID		
Vinyl-2-Pyrrolidinone,1-	C <sub>6</sub> H <sub>9</sub> NO	88-12-0	0.05	94	0.8	PID			
Xylene,m-	C <sub>8</sub> H <sub>10</sub>	108-38-3	100	139	0.44	PID	PID		
Xylene,o-	C <sub>8</sub> H <sub>10</sub>	95-47-6	100	144	0.46	PID	PID		
Xylene,p-	C <sub>8</sub> H <sub>10</sub>	106-42-3	100	138	0.39	PID	PID		

\* TWA taken as ACGIH 8-hr value wherever available. A few of these are AIHA WEELs or NIOSH RELs.

C = Ceiling, STEL = Short Term Exposure Limit, MAK = German Maximum Allowable Concentration