

GAS OR VAPOR TO BE MEASURED	CHEMICAL FORMULA	1) TLV-TWA (ACGIH)	2) TUBE NO.	3) DETECTOR TUBE TO BE USED	MEASURABLE CONCENTRATION RANGE	4) PUMP STROKES TAKEN	5) SHELF LIFE (YEAR)	6) SEI TUBE
Acetaldehyde	CH ₃ CHO	100ppm	*92 *91L	Acetaldehyde Formaldehyde-(LR)	4-750ppm 1-12ppm	1-4 2-4	1.5 1	
Acetic Acid	CH ₃ COOH	10ppm	81	Acetic Acid	1-100ppm	1/2-2	3	
Acetic Anhydride	(CH ₃ CO) ₂ O	C, 5ppm	81	Acetic Acid	0.3-30ppm	1/2-2	3	
Acetone	(CH ₃) ₂ CO	750ppm	151 *151L	Acetone Acetone (LR)	0.01-2.0% 50-12,000ppm	1-2 1-2	3 2	x
Acetone Cyanohydrin	(CH ₃) ₂ C(OH)CN	—	12L	Hydrogen Cyanide-(LR)	5-70ppm	1	2	
Acetonitrile (Methyl Cyanide)	CH ₃ CN	40ppm	52 (PYR)	Nitroparaffins	3-180ppm	1	1.5	
Acetylene	C ₂ H ₂	—	171 +103	Acetylene Hydrocarbons, Low Class	0.05-4.0% 0.075-36%	1/2-2 1/2-2	3 2	
Acetylene Dichloride	See 1,2-Dichloroethane							
Acetylene Tetrabromide	See 1,1,2,2-Tetrabromoethane							
Acetylene Tetrachloride	See 1,1,2,2-Tetrachloroethane							
Acids Test	Varied	—	80	Acids Test (11)	1-80ppm	1-4	1	
Acrolein	CH ₂ CHCHO	0.1ppm	*93	Acrolein	3-800ppm	2-4	2	
Acrylic Acid	CH ₂ CHCOOH	2ppm	81	Acetic Acid	1-100ppm	1/2-2	3	
Acrylonitrile	CH ₂ CHCN	2ppm	+191 +191L	Acrylonitrile Acrylonitrile-(LR)	2-360ppm 0.125-15ppm	1-4 2-7	2 2	
Air Current	See Smoke Tubes							
Alcohol	See Ethyl or Methyl Alcohol							
Aliphatic Hydrocarbons	See Hydrocarbons							
Alkenes	See Olefins							
Allyl Chloride	CH ₂ CHCH ₂ Cl	1ppm	*+131La	Vinyl Chloride	25-270ppm	1	2	
Amines	Varied	—	180	Amines	0.25-60ppm	1-2	3	
2-Aminoethanol	See Ethanolamine							
2-Aminopropane	See Isopropyl Amine							
Ammonia	NH ₃	25ppm	3H 3M 3La 3L	Ammonia-(HR) Ammonia-(MR) Ammonia-(LR) Ammonia-(LR)	0.2-32% 10-1000ppm 1-200ppm 1-60ppm	1/2-5 1/2-5 1/2-2 1/2-2	3 3 3 3	x
n-Amyl Acetate	CH ₃ COOC ₂ H ₄ CH(CH ₃) ₂	100ppm	142 147	Butyl Acetate n-Amyl Acetate	0.01-0.9% 10-200ppm	2 2	3 2	
Aniline	C ₆ H ₅ NH ₂	2ppm	*181	Aniline	1.25-60ppm	2-5	1	
Arsine	AsH ₃	0.05ppm	19La	Arsine-(LR)	0.04-10ppm	1-10	2	
Aziridine	See Ethyleneimine							
Benzaldehyde	C ₆ H ₅ CHO	—	*91L	Formaldehyde-(LR)	2-92ppm	1	1	
Benzene	C ₆ H ₆	10ppm	+121S 121 121SL +121L	Benzene Benzene Benzene-(LR) Benzene-(LR)	2-312ppm 2.5-120ppm 1-100ppm 0.125-60ppm	1-4 1-4 1-5 1-10	3 3 2 3	x
Benzyl Bromide	C ₆ H ₅ CH ₂ Br	—	+136	Methyl Bromide	25-850ppm	1	2	
Benzyl Chloride	C ₆ H ₅ CH ₂ Cl	1ppm	*132L	Trichloroethylene-(LR)	0.5-25ppm	1	2	
Boron Trichloride	BCl ₃	—	12L	Hydrogen Cyanide-(LR)	1-14ppm	2	2	
Bromine	Br ₂	0.1ppm	9L 8La	Nitrogen Dioxide-(LR) Chlorine	2.23ppm 0.1-1.6ppm	2 4	2 2	
2-Bromo-2-Chloro-1,1,1-Trifluoroethane	See Halothane							
Bromoethane	See Ethyl Bromide							
Bromoform (Tribromomethane)	CHBr ₃	0.5ppm	+136	Methyl Bromide	1-50ppm	1	2	
Butadiene	CH ₂ CHCHCH ₂	10ppm	174 174L 174La	Butadiene Butadiene-(LR) Butadiene	50-800ppm 2.5-100ppm 5-100ppm	1 4-8 1	3 2 1	
Butane	C ₄ H ₁₀	800ppm	104 +103	n-Butane Hydrocarbons-Low Class	25-1400ppm 0.035-1.68%	1 1/2-2	3 2	
1-Butanol	See n-Butyl Alcohol							
2-Butanol	See sec-Butyl Alcohol							
2-Butanone	See Methyl Ethyl Ketone							
2-Butoxyethanol	See Ethylene Glycol Monobutyl Ether							

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n-Butyl Acetate	CH ₃ COOC ₄ H ₉	150ppm	142 142L	Butyl Acetate Butyl Acetate-(LR)	0.01-0.8% 10-300ppm	2 2	3 2	
Butyl Acrylate	CH ₂ CHCOOC ₄ H ₉	10ppm	142L	Butyl Acetate-(LR)	5-65ppm	2	2	
n-Butyl Alcohol (n-Butanol)	C ₄ H ₉ OH	50ppm	112 114	Ethyl Alcohol (Ethanol) n-Butyl Alcohol	100-1500ppm 5-150ppm	4 3-6	3 2	
sec-Butyl Alcohol	C ₂ H ₄ (OH)C ₂ H ₅	100ppm	112 115	Ethyl Alcohol (Ethanol) sec-Butyl Alcohol	100-3500ppm 5-150-ppm	4 4-8	3 2	
tert-Butyl Alcohol	(CH ₃) ₃ COH	100ppm	102L 104	n-Hexane-(LR) n-Butane	1000-8900ppm 1000-10,000ppm	2 2	3 3	
n-Butyl Amine	C ₄ H ₉ NH ₂	5ppm	180	Amines	1-60ppm	1/2-2	3	
sec-Butyl Amine	CH ₃ CHNH ₂ C ₂ H ₅	5ppm	180	Amines	1-60ppm	1/2-2	3	
Butyl Cellosolve	See Ethylene Glycol Monobutyl Ether							
tert-Butyl Mercaptan	(CH ₃) ₃ C ₂ H ₄ SH	0.5ppm	75 75L	tert-ButylMercaptan tert-ButylMercaptan	2.5-30mg/m ₃ 0.5-30mg/m ₃	2 1/2-2	2 2	
Butyronitrile	CH ₃ (CH ₂) ₂ CN	5mg/m ₃	+191L	Acrylonitrile-(LR)	50-300ppm	1	2	
Carbon Dioxide	CO ₂	5000ppm	2HT 2HH 2H 2L 2LL	Carbon Dioxide-(XHR) (7)(9) Carbon Dioxide-(HR) Carbon Dioxide-(HR) Carbon Dioxide-(LR) Carbon Dioxide-(XLR)	10-100% 2.5-40% 0.5-20% 0.13-6.0% 100-11,500ppm	20ml/20sec 1/2-1 1/2-2 1/2-2 1/2-3	3 3 3 3 3	
Carbon Disulfide	CS ₂	10ppm	+13M +13	Carbon Disulfide-(MR) Carbon Disulfide	20-4000ppm 0.63-100ppm	1/2-2 1/2-4	3 3	
Carbon Monoxide	CO	50ppm	1HH 1H 1M 1L 1La 1LL	Carbon Monoxide-(XHR) Carbon Monoxide-(HR) Carbon Monoxide-(MR) Carbon Monoxide-(LR) Carbon Monoxide-(LR) Carbon Monoxide-(XLR)	1-40% 0.1-10% 0.05-4.0% 5-2000ppm 8-1000ppm 5-50ppm	1/2-1 1/2-1 1/2-2 1/2-5 1/2-3 2	2 2 2 3 2 2	
Carbon Monoxide in Hydrogen	CO in H ₂	—	1LK	Carbon Monoxide in Hydrogen	5-300ppm	1-3	2	
Carbon Tetrachloride	CCl ₄	5ppm	*+134	Carbon Tetrachloride	1-60ppm	1-5	1	
Carbonyl Chloride	See Phosgene							
Carbonyl Sulfide	COS	—	*+21	Carbonyl Sulfide	5-200ppm	1/2-2	2	
Chlorine	Cl ₂	0.5ppm	8HH 8H 8La	Chlorine-(XHR) Chlorine Chlorine-(LR)	0.25-10% 25-1000ppm 0.05-16ppm	1/2-2 1/2-2 1/2-10	2 2 2	
Chlorine Dioxide	ClO ₂	0.1ppm	8La	Chlorine-(LR)	0.33-16ppm	1/2-3	2	
Chlorobenzene (Monochlorobenzene)	C ₆ H ₅ Cl	75ppm	126 121	Chlorobenzene Benzene	2-500ppm 5-350ppm	1/2-2 1-2	3 3	
Chlorobromomethane	CH ₂ ClBr	200ppm	+136 +135	Methyl Bromide Methyl Chloroform	8-80ppm 20-350ppm	1 1	2 1	
Chlorodifluoromethane (Fluorochlorocarbon 22)	CHClF ₂	1000ppm	+51 +51H +51L	Fluorochlorocarbon (PYR) Fluorochlorocarbons (HR)(PYR) Fluorochlorocarbons (LR)(PYR)	25-100ppm 1000-8000ppm 2.5-128ppm	1 1 1-2	2 2 2	
1-Chloro-2,3-Epoxypropane	See Epichlorohydrine							
Chloroform	CHCl ₃	10ppm	+137	Chloroform	4-400ppm	3-7	2	
Chloroformates	See Ethyl Chloroformate or Methyl Chloroformate							
Chloropicrin (Trichloronitromethane)	CCl ₃ NO ₂	0.1ppm	*+134	Carbon Tetrachloride	1-60ppm	1-5	1	
3-Chloro-1-Propene	See Allyl Chloride							
1-Chloro-2,2,2-Trichloroethylchloromethyl Ether	See Isoflurane							
2-Chloro-1,1,2-Trifluoroethylidifluoromethyl Ether	See Enflurane							
m-Cresol	C ₆ H ₄ OHCH ₃	5ppm	*61	Cresol	1-28ppm	2	2	
o-Cresol	C ₆ H ₄ OHCH ₃	5ppm	*61	Cresol	0.4-62.5ppm	1-4	2	
p-Cresol	C ₆ H ₄ OHCH ₃	5ppm	*61	Cresol	1-30ppm	2	2	

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Cumene	$C_6H_5CH(CH_3)_2$	50ppm	122 122L	Toluene Toluene-(LR)	5-2400ppm 2-100ppm	1/2-2 2	3 3	
Cyanide	See Hydrogen Cyanide							
Cyclohexane	C_6H_{12}	300ppm	102H	Hexane-(HR)	0.015-1.2%	1/2-2	3	
Cyclohexanol	$C_6H_{11}O_6$	50ppm	118 112L	Cyclohexanol Ethyl Alcohol-(LR)	5-100ppm 30-150ppm	5-10 5	2 2	
Cyclohexanone	$C_6H_{10}O$	25ppm	*154	Cyclohexanone	2-60ppm	2-4	2	
Cyclohexene	C_6H_{10}	300ppm	151	Acetone	100-1000ppm	1	3	
Cyclohexylamine	$C_6H_{13}N$	10ppm	180	Amines	1-60ppm	1/2-2	3	
Cyclohexyl Chloride	$C_6H_{11}Cl$	—	102L	n-Hexane-(LR)	40-1200ppm	2	3	
n-Decane	$CH_3(CH_2)_8CH_3$	—	105	Hydrocarbons, High Class	200-6000ppm	1-2	2	
Diacetone Alcohol	$CH_3COCH_2C(CH_3)_2OH$	50ppm	154	Cyclohexanone	5-150ppm	1-2	2	
1,2-Diaminoethane	See Ethylene Diamine							
Diborane	B_2H_6	0.1ppm	22	Diborane	0.02-5ppm	1-5		
1,1-Dibromoethane (Ethylidene Dibromide)	$CHBr_2CH_2$	—	+136	Methyl Bromide	7-70ppm	1	2	
1,2-Dibromoethane (Ethylene Dibromide)	CH_2BrCH_2Br	—	+136	Methyl Bromide	6-80ppm	1	2	
m-Dichlorobenzene	$C_6H_4Cl_2$	—	127	Dichlorobenzene	2.5-300ppm	2	3	
o-Dichlorobenzene	$C_6H_4Cl_2$	C, 50ppm	121	Benzene	50-700ppm	1	3	
p-Dichlorobenzene	$C_6H_4Cl_2$	75ppm	127	Dichlorobenzene	2.5-300ppm	2	3	
Dichlorodifluoromethane (Fluorochlorocarbon 12)	CCl_2F_2	1000ppm	+51 +51H +51L	Fluorochlorocarbons (PYR) Fluorochlorocarbons (HR)(PYR) Fluorochlorocarbons (LR)(PYR)	11-440ppm 325-2600ppm 1.8-76ppm	1 1 1-2	2 2 2	
1,1-Dichloroethane	Cl_2CHCH_3	200ppm	+135	Methyl Chloroform	30-1300ppm	1-4	1	
1,2-Dichloroethane (Ethylene Dichloride)	CH_2ClCH_2Cl	10ppm	+135 +135L	Methyl Chloroform Methyl Chloroform	200-2600ppm 8-150ppm	3 3-5	1 1	
1,1-Dichloroethylene	See Vinylidene Chloride							
1,2-Dichloroethylene (Acetylene Dichloride)	$CHClCHCl$	200ppm	*132H *139	Trichloroethylene-(HR) Dichloroethylene	10-450ppm 10-450ppm	1 1	2 2	
2,2-Dichloro-2 Fluoroethane (Fluorochlorocarbon HCFC 1416)	CH_3CCl_2F		+51 +51L	Fluorochlorocarbons (PYR) Fluorochlorocarbons (LR)(PYR)	10-400ppm 1-20ppm	1 2	2 2	
Dichloromethane	See Methylene Chloride							
1,2-Dichloropropane (Propylene Dichloride)	$CH_3CHClCH_2Cl$	75ppm	*+131La +135	Vinyl Chloride-(LR) Methyl Chloroform	40-600ppm 30-1500ppm	2 4	2 1	
Dichlorotetrafluoroethane (Fluorochlorocarbon 114)	$CClF_2CClF_2$	1000ppm	+51 +51H +51L	Fluorochlorocarbons (PYR) Fluorochlorocarbons (HR)(PYR) Fluorochlorocarbons (LR)(PYR)	20-800ppm 475-3800ppm 1.8-94ppm	1 1 1-2	2 2 2	
1,1-Dichloro-2,2,2- trifluoroethane (Fluorochlorocarbon HCFC-123)	$CHCl_2CF_3$	—	+51 +51L	Fluorochlorocarbons (PYR) Fluorochlorocarbons (LR)(PYR)	40-1600ppm 1.4-28ppm	1/2-1 1	2 2	
Diethanolamine	$(HOCH_2CH_2)_2NH$	3ppm	180	Amines	1-60ppm	1/2-2	3	
Diethyl Amine	$(C_2H_5)_2NH$	10ppm	180	Amines	1-60ppm	1/2-2	3	
Diethyl Benzene	$C_6H_4(CH_3)_2$	—	122 122L	Toluene Toluene-(LR)	25-2400ppm 2-150ppm	2 4	3 3	
Diethylene Dioxide	See Dioxane							
Diethylene Glycol	$CH_2OHCH_2OCH_2CH_2OH$	—	165	Ethylene Glycol	22-40mg/M3	5	2	
Diethylenetriamine	$C_4H_{13}N_3$	1ppm	180	Amines	1-60ppm	1/2-2	3	
Diethyl Ether	See Ethyl Ether							
Diisobutylene	C_8H_{16}	—	121	Benzene	45-540ppm	1	3	
Diisobutyl Ketone	$(CH_3)_2CHCH_2COCH_2CH(CH_3)_2$	25ppm	*91L	Formaldehyde-(LR)	1-36ppm	4	1	
Diisopropylamine	$C_6H_{15}N$	5ppm	180	Amines	1-60ppm	1/2-2	3	
Diisopropyltoluene	$(C_3H_7)_2C_6H_5CH_3$	—	141L	Ethyl Acetate(LR)	12-400ppm	1/2	2	
Dimethyl Acetamide	$CH_3CON(CH_3)_2$	10ppm	184	Dimethyl Acetamide	1.5-240ppm	1-4	2	

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Dimethyl Amine	(CH ₃) ₂ NH	10ppm	180 3H	Amines Ammonia (HR)	1-60ppm 0.38-18.4%	1/2-2 1-3	3 3	
Dimethylamino-ethanol	(CH ₃) ₂ NCH ₂ CH ₂ OH	—	180	Amines	3-110ppm	1	3	
Dimethyl Aniline	C ₆ H ₅ (CH ₃) ₂	5ppm	*181	Aniline	2.5-4.5ppm	3	1	
Dimethyl Ether (Methyl Ether)	(CH ₃) ₂ O	—	161	Ethyl Ether (Ether)	0.03-0.9%	1	3	
Dimethylethylamine	(CH ₃) ₂ NC ₂ H ₅	—	180	Amines	1-60ppm	1/2-2	3	
Dimethyle								
Dimethylformamide	HCON(CH ₃) ₂	10ppm	183	Dimethyl Formamide	0.8-90ppm	1/2-2	2	
Di-n-propylamine	(C ₃ H ₇) ₂ NH	—	180	Amines	1-60ppm	1/2-2	3	
1,4-Dioxane	(C ₂ H ₄ O)	25ppm	163 159	Ethylene Oxide Tetrahydrofuran	0.6-5.6% 25-140ppm	1 2	3 2	
1,3-Dioxolan	C ₆ H ₁₂ O ₃	—	113L	Isopropyl Alcohol-(LR)	20-320ppm	1	2	
Divinyl Benzene	C ₆ H ₄ (CHCH ₂) ₂	10ppm	124L	Styrene-(LR)	1-20ppm	3	3	
Divinyl Methoxysilane	CH ₃ OSiH(CHCH ₂) ₂	—	113L	Isopropyl Alcohol-(LR)	2.5-40ppm	2	2	
Enflurane	C ₃ H ₂ ClF ₅ O	75ppm	+51 +51L	Fluorochlorocarbons (PYR) Fluorochlorocarbons (LR)(PYR)	200-1200ppm 25-145ppm	1 2	2 2	
Epichlorohydrin	C ₃ H ₅ ClO	2ppm	163L	Ethylene Oxide-(LR)	0.5-130ppm	2	1	
Ethanthiol	See Ethyl Mercaptan or Mercaptans, Total							
Ethanol	See Ethyl Alcohol							
Ethanolamine	C ₂ H ₇ NO	3ppm	180	Amines	1-60ppm	1/2-2	3	
Ether	See Ethyl Ether							
2, Ethoxyethanol	See Ethylene Glycol Monocethyl Ether							
2, Ethoxyethyl Acetate	See Ethylene Glycol Monocethyl Ether Acetate							
Ethyl Acetate	CH ₃ COOC ₂ H ₅	400ppm	141 141L	Ethyl Acetate Ethyl Acetate-(LR)	0.04-1.5% 25-800ppm	1 2	3 2	
Ethyl Acrylate	CH ₂ CHCOOCH ₂ CH ₃	5ppm	151	Acetone	0.05-0.65%	2	3	
Ethyl Alcohol	C ₂ H ₅ OH	1000ppm	112 112L	Ethyl Alcohol Ethyl Alcohol-(LR)	0.01-7.5% 25-2000ppm	1/2-2 1-2	3 2	
Ethyl Amine	C ₂ H ₅ NH ₂	10ppm	180	Amines	1-60ppm	1/2-2	3	
Ethyl Benzene	C ₆ H ₅ C ₂ H ₅	100ppm	122 122L	Toluene Toluene-(LR)	7-700ppm 1-70ppm	1/2-2 2	3 3	
Ethyl Cellosolve	See Ethylene Glycol Monocethyl Ether							
Ethylbenzyl Chloride	ClCH ₂ C ₆ H ₄ C ₂ H ₅	—	*+131La	Vinyl Chloride-(LR)	6-42.5ppm	2	2	
Ethyl Bromide	C ₂ H ₅ Br	200ppm	+136	Methyl Bromide	10-90ppm	1	2	
Ethyl Chloride	C ₂ H ₅ Cl	1000ppm	139	Methylene Chloride	250-10,000ppm	3-5	1	
Ethyl Chloroformate	ClCOOC ₂ H ₅	—	+131La	Vinyl Chloride-(LR)	15-140ppm	2	2	
Ethyl Cyanide	See Propionitrile							
Ethylene (Ethene)	C ₂ H ₄	—	172 172L	Ethylene Ethylene-(LR)	25-800ppm 0.2-50ppm	1 4	3 2	
Ethylene Bromide	See 1,2-Dibromoethane							
Ethylene Chloride	See 1,2-Dichloroethane							
Ethylene Chlorohydrin	ClCH ₂ CH ₂ OH	C,1ppm	111L	Methyl Alcohol(LR)	20-200ppm	3	2	
Ethylenediamine	C ₂ H ₄ (NH ₂) ₂	10ppm	180	Amines	2-120ppm	1/2-2	3	
Ethylene Dibromide (EDB)	See 1,2-Dibromoethane							
Ethylene Dichloride	See 1,2-Dichloroethane							
Ethylene Glycol	C ₂ H ₆ O ₂	C,50ppm	*+165	Ethylene Glycol	50-300mg/m ₃	3	2	
Ethylene Glycol Monobutyl Ether (Butyl Cellosolve)	C ₄ H ₉ OCH ₂ CH ₂ OH	25ppm	113L	Isopropyl Alcohol-(LR)	60-640ppm	2	2	
Ethylene Glycol Monoethyl Ether (Cellosolve)	C ₂ H ₅ OCH ₂ CH ₂ OH	5ppm	113L	Isopropyl Alcohol-(LR)	100-1200ppm	2	2	
Ethylene Glycol Monoethyl Ether Acetate	CH ₃ COOCH ₂ CH ₂ OC ₂ H ₅	5ppm	113L	Isopropyl Alcohol-(LR)	6-96ppm	3	2	

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Ethylene Glycol Monomethyl Ether (Methyl Cellosolve)	CH ₃ OCH ₂ CH ₂ OH	5ppm	113L	Isopropyl Alcohol-(LR)	30-900ppm	2	2	
Ethylene Glycol Monomethyl Ether Acetate (Methyl Cellosolve Acetate)	C ₂ H ₅ OCH ₂ CH ₂ O(C)CCH ₃	5ppm	113L	Isopropyl Alcohol-(LR)	50-700ppm	2	2	
Ethylene Imine	C ₂ H ₅ N	.5ppm	180	Amines	1-60ppm	1/2-2	3	
Ethylene Oxide	(CH ₂) ₂ O	1ppm	163 +163L	Ethylene Oxide Ethylene Oxide-(LR)	0.05-3.0% 0.4-100ppm	1 2-4	3 1	
Ethyl Ether (Ether)	(C ₂ H ₅) ₂	400ppm	161 161L	Ethyl Ether Ethyl Ether-(LR)	0.04-1.0% 10-1200ppm	1 1-2	3 2	
Ethylidene Chloride	See 1,1-Dichloroethane							
Ethylidene Dibromide	See 1,1-Dichloromethane							
Ethyl Mercaptan	C ₂ H ₅ SH	0.5ppm	72 72P	Ethyl Mercaptan Ethyl Mercaptan in LP Gas (10)	0.5-120ppm 2.5-40ppm	1-10 1 minute at residential line pressure	3 2	
n-Ethyl Morpholine	CH ₂ CH ₂ OCH ₂ CH ₂ NCH ₂ CL ₃	5ppm	180	Amines	0.5-60ppm	1/2-2	3	
Fluorine	F ₂	1ppm	17	Hydrogen Fluoride	2.5-100ppm	1	3	
Fluorochlorocarbons	See separate entries.							
Fluorochlorocarbon-11	See Trichlorofluoromethane							
Fluorochlorocarbon-12	See Dichlorofluoromethane							
Fluorochlorocarbon-22	See Chlorofluoromethane							
Fluorochlorocarbon-30	See Methylene Chloride							
Fluorochlorocarbon-112	See Tetrachlorodifluoroethane							
Fluorochlorocarbon-113	See 1,1,2-Trichloro-1,2,2-Trifluoroethane							
Fluorochlorocarbon-113b	See 1,1,1-Trichloro-2,2,2-Trifluoroethane							
Fluorochlorocarbon-114	See Dichlorotetrafluoroethane							
Fluorochlorocarbon HCFC 123	See 1,1-Dichloro-2,2,2-Difluoroethane							
Fluorochlorocarbon HCFC 134a	See 1,2,2,2-Tetrafluoroethane							
Fluorochlorocarbon HCFC 141b	See 2,2-Dichloro-2-Fluoroethane							
Fluorotrichloromethane	See Trichlorofluoromethane							
Formaldehyde	HCHO	1ppm	+91 *91L	Formaldehyde Formaldehyde-(LR)	2-20ppm 0.1-32.5ppm	2 1-5	3 1	
Formic Acid	HCOOH	5ppm	81	Acetic Acid	5.2-130ppm	1	3	
Freons(TN)	See Fluorochlorocarbons							
Furfural	C ₅ H ₄ O ₂	2ppm	*154	Cyclohexanone	2-60ppm	2-4	2	
Gasoline	Mixture	300ppm	101 101L	Gasoline Gasoline-(LR)	0.015-1.2% 30-1000ppm	1/2-2 2	3 3	
Halothane	CF ₃ CHBrCl	50ppm	+51H	Fluorochlorocarbons (HR)(PYR)	1600-6400ppm	1	2	
			+51	Fluorochlorocarbons (PYR)	240-960ppm	1	2	
			+51L	Fluorochlorocarbons (LR)(PYR)	3-60ppm	2	2	
Heptamethylene Diamine	NH ₂ (CH ₂) ₇ NH ₂	—	180	Amines	0.5-30ppm	1/2-2	3	
n-Heptane	C ₇ H ₁₆	400ppm	101	Gasoline	0.015-1.2%	1/2-2	3	
				Hydrocarbons-High Class	90-2700ppm	1-2	3	
Hexamethylene Diamine	NH ₂ (CH ₂) ₆ NH ₂	—	180	Amines	0.5-30ppm	1/2-2	3	
n-Hexane	C ₆ H ₁₄	50ppm	102H	Hexane-(HR)	0.015-1.2%	1/2-2	3	
			102L	n-Hexane-(LR)	50-1200ppm	1	3	
			105	Hydrocarbons-High Class	80-2400ppm	1-2	2	
			106	Hydrocarbons-Petroleum Distillates	300-4000ppm	1	3	
Hexone	See Methyl Isobutyl Ketone							
2-Hexyl Alcohol	CH ₃ (CH ₂) ₄ CH ₂ OH	—	141L	Ethyl Acetate-(LR)	75-2400ppm	3	2	
Hexylamine	CH ₃ (CH ₂) ₅ NH ₂	—	180	Amines	1-60ppm	1/2-2	3	
Humidity Removal Pretube	—	—	RH001	Contact Messer GT&S for applications (8)				

GAS OR VAPOR TO BE MEASURED	CHEMICAL FORMULA	1) TLV-TWA (ACGIH)	2) TUBE NO.	3) DETECTOR TUBE TO BE USED	MEASURABLE CONCENTRATION RANGE	4) PUMP STROKES TAKEN	5) SHELF LIFE (YEAR)	6) SEI TUBE
Hydrazine	N ₂ H ₄	0.1ppm	185 180	Hydrazine Amines	0.05-2ppm 2-120ppm	5-10 1/2-2	2 3	
Hydrocarbons-High Class (n-Octane, Nonane, Decane)	Varied	—	105	Hydrocarbons-High Class	100-3000ppm	1	3	
Hydrocarbons-Low Class (Propane, Butane)	Varied	—	+103	Hydrocarbons-Low Class	0.05-2.4%	1/2-2	1	
Hydrocarbons, Petroleum Distillates	Varied	—	106	Hydrocarbon Petroleum Distillates	0.5-28mg/L mg/m ₃	1/2-2	3	
Hydrochloric Acid	See Hydrogen Chloride							
Hydrocyanic Acid	See Hydrogen Cyanide							
Hydrofluoric Acid	See Hydrogen Fluoride							
Hydrogen	H ₂	—	30	Hydrogen (Color Intensity Tube)	0.5-2.0%	1	3	
Hydrogen Bromide	HBr	3ppm	14L	Hydrogen Chloride-(LR)	2.5-27.5ppm	4	3	
Hydrogen Chloride (Hydrochloric Acid)	HCl	5ppm	14M 14L	Hydrogen Chloride-(MR) Hydrogen Chloride-(LR)	10.1000ppm 0.1-40ppm	1/2-2 1/2-5	3 3	✓
Hydrogen Cyanide (Hydrocyanic Acid)	HCN	10ppm	12H 12M 12L	Hydrogen Cyanide-(HR) Hydrogen Cyanide-(MR) Hydrogen Cyanide-(LR)	0.05-2.0T 17-2400ppm 0.36-120ppm	1 1/2-2 1/2-5	3 2 2	✓
Hydrogen Fluoride	HF	3ppm	17	Hydrogen Fluoride	0.25-100ppm	1-7	3	
Hydrogen Sulfide	H ₂ S	10ppm	4HT 4HP 4HH 4H 4HM 4M 4L 4LL *4LT	Hydrogen Sulfide Hydrogen Sulfide Hydrogen Sulfide-(XHR) Hydrogen Sulfide-(HR) Hydrogen Sulfide-(MR) Hydrogen Sulfide-(MR) Hydrogen Sulfide-(LR) Hydrogen Sulfide-(XLR) Hydrogen Sulfide-(XLR)	1-40% 0.25-20% 0.1-4.0% 10-3200ppm 25-1600ppm 12.5-500ppm 1-240ppm 0.25-60ppm 0.1-4ppm	1/2-2 1/2-2 1/2-1 1-10 1/2-2 1/2-2 1/2-10 1-10 1/2-2	3 3 3 3 3 3 3 3 2	✓
Hydrogen Sulfide/Sulfur Dioxide (Total Sulfur Tube)	H ₂ S/SO ₂	—	45H	Hydrogen Sulfide/ Sulfur Dioxide	0.02-8.0%	1/2-1	2	
Hydrogen Sulfide/ Sulfur Dioxide (Simultaneous Tube)	H ₂ S/SO ₂	10ppm(H ₂ S)/ 2ppm(SO ₂)	45S	Hydrogen Sulfide Sulfur Dioxide	1.25-120ppm(H ₂ S) 0.25-20ppm(SO ₂)	1/2-2	3	
Iodine	I ₂	0.2ppm	9L	Nitrogen Dioxide-(LR)	0.5-12ppm	2	2	
Isoamyl Acetate	CH ₃ CO ₂ CH ₂ CH ₂ CH(CH ₃) ₂	100ppm	148	Isoamyl Acetate	10-200ppm	2	2	
Isoamyl Alcohol, Primary	See Isopentyl Alcohol							
Isobutane	(CH ₃) ₂ CHCH ₃	—	+103	Hydrocarbon-Low Class	0.035-1.68%	1/2-2	2	
Isobutyl Acetate	CH ₃ COOC ₂ H ₅ (CH ₃) ₂	150ppm	142 144	Butyl Acetate Isobutyl Acetate	0.005-0.66% 10-300ppm	2 2	3 2	
Isobutyl Alcohol	(CH ₃) ₂ CHCH ₂ OH	50ppm	112 116	Ethyl Alcohol (Ethanol) Isobutyl Alcohol	100-3000ppm 5-150ppm	2-4 3-6	3 2	
Isopentane	CF ₃ CHClOCHF ₂	—	+51 +51L	Fluorochlorocarbons (PYR) Fluorochlorocarbons (LR)(PYR)	200-1000ppm 30-120ppm	1 2	2 2	
Iso-Octane	(CH ₃) ₂ C ₂ H ₅ (CH ₃) ₂	—	101	Gasoline	0.015-1.2%	1/2-2	3	
Isopentyl Alcohol (Primary Amyl Alcohol)	(CH ₃) ₂ CHCH ₂ CH ₂ OH	—	117	Isopentyl Alcohol	10-300ppm	1-4	2	
Isophorone	C ₉ H ₁₄ O	5ppm	154	Cyclohexanone	2-60ppm	2-4	2	
Isopropyl Acetate	CH ₃ COOCH(CH ₃) ₂	250ppm	151	Acetone Isopropyl Acetate	0.05-0.75% 25-500ppm	2 2	3 2	
Isopropyl Alcohol (Isopropanol)	(CH ₃) ₂ CHOH	400ppm	113 113L	Isopropyl Alcohol (Ethanol) Isopropyl Alcohol (Isopropanol) Isopropyl Alcohol-(LR)	100-3000ppm 5-150ppm 25-800ppm	2-4 3-6 1-2	3 2 3	
Isopropyl Benzene	See Cumene							
Isopropylamine	C ₃ H ₉ N	5ppm	180	Amines	1-60	1/2-2	3	
Isopropyl Ether	(CH ₃) ₂ CHOCH(CH ₃) ₂	250ppm	161 141L	Ethyl Ether Ethyl Acetate-(LR)	180-4500ppm 22.5-720ppm	2 2	3 2	
Isopropyl Mercaptan	(CH ₃) ₂ CH(HS)	—	70	Mercaptans	1-200ppm	1-10	3	
Kerosene	Hydrocarbon Mixture	—	121 106	Benzene Petroleum Distillates	250-4000ppm 0.5-28mg/L	2 1/2-2	3 3	
L.P. Gas	Hydrocarbon Mixture	1000ppm	100A	L.P. Gas	0.02-0.8%	1	3	
Maleic Anhydride	CHCHC(O)CC(O)	0.25ppm	91	Acetic Acid	0.4-40ppm	1/2-2	3	

GAS OR VAPOR TO BE MEASURED	CHEMICAL FORMULA	1) TLV-TWA (ACGIH)	2) TUBE NO.	3) DETECTOR TUBE TO BE USED	MEASURABLE CONCENTRATION RANGE	4) PUMP STROKES TAKEN	5) SHELF LIFE (YEAR)	6) SEI TUBE
Mercaptans, Total	R-SH	—	70	Total Mercaptans (Also see Ethyl, Methyl and Butyl Mercaptan) Total Mercaptans(LR)	0.5-120ppm	1-10	3	
			70L	I-Butyl Mercaptans(LR)	0.1-8ppm	1/2-4	2	
2 Mercaptoethanol	HSCH ₂ CH ₂ OH	—	75L	I-Butyl Mercaptans(LR)	0.5-7.5ppm	1	2	
Mercury Vapor	Hg	0.05mg/m ³	40	Mercury Vapor	0.05-13.2mg/m ³	1	2	
Metaldehyde	(CH ₃ CHO) ₄	—	*91L	Formaldehyde(LR)	0.13-3.25ppm	3	1	
Methacrylic Acid	CH ₂ C(CH ₃)COOH	20ppm	81	Acetic Acid	0.9-90ppm	1/2-2	3	
Methacrylonitrile	CH ₂ C(CH ₃)CN	1ppm	+192	Methacrylonitrile	0.2-32ppm	1-4	2	
Methanethiol	See Methyl Mercaptan							
Methanol	See Methyl Alcohol							
2-Methoxyethanol	See Ethylene Glycol Monomethyl Ether							
2-Methoxyethyl Acetate	See Ethylene Glycol Monomethyl Ether Acetate							
1-Methoxy-2-Propanol	CH ₃ OCH ₂ CH(OH)CH ₃	—	113L	Isopropyl Alcohol-(LR)	50-800ppm	4	2	
Methyl Acrylate	CH ₂ CHCOOCH ₃	10ppm	151	Acetone	0.07-0.75%	2	3	
Methyl Alcohol (Methanol)	CH ₃ OH	200ppm	111	Methyl Alcohol (Methanol)	0.004-4.5%	1/2-2	3	
			111L	Methyl Alcohol-(LR)	20-1000ppm	1-2	2	
2-Methylallyl Chloride	CH ₂ C(CH ₃)CH ₂ Cl	—	*+131La	Vinyl Chloride-(LR)	5-55ppm	1	2	
Methyl Amine	CH ₃ NH ₂	10ppm	180	Amines	1-60ppm	1/2-2	3	
n-Methyl Aniline	C ₆ H ₅ NH(CH ₃)	0.5ppm	181	Aniline	3.5-42ppm	2	2	
Methyl Bromide	CH ₃ Br	5ppm	+136	Methyl Bromide	2-200ppm	1/2-4	2	
			+136La	Methyl Bromide	1-36ppm	1-2	2	√
			+136H	Methyl Bromide-(HR)	10-600ppm	1/2-2	3	
2-Methyl, 3-Butenitrile	CH ₂ CHCH(CH ₃)CN	—	+19L	Acetonitrile	1.2-11.5ppm	4	2	
Methyl Cellosolve	See Ethylene Glycol Monomethyl Ether							
Methyl Chloride	CH ₃ Cl	50ppm	+51	Fluorochlorocarbons (PYR)	12-480ppm	1	2	
			+51L	Fluorochlorocarbons (LR)(PYR)	1.6-74ppm	1-2	2	
Methyl Chloroform (1,1,1-Trichloroethane)	CH ₃ CCl ₃	350ppm	+135	Methyl Chloroform	100-500ppm	1	1	
			+135L	Methyl Chloroform-(LR)	20-200ppm	1	1	
Methyl Chloroformate	ClCOOC ₃	—	+131La	Vinyl Chloride-(LR)	70-1050ppm	5	2	
Methyl Cyanide	See Acetonitrile							
Methyl Cyclohexane	CH ₃ C ₆ H ₁₁	400ppm	102H	Hexane(HR)	0.04-0.84%	1	3	
Methyl Cyclohexanol	CH ₃ C ₆ H ₁₀ OH	50ppm	119	Methyl Cyclohexanol	5-100ppm	5-10	2	
Methyl Cyclohexanone	CH ₃ C ₅ H ₉ COH	50ppm	*155	Methyl Cyclohexanone	2-100ppm	2-3	2	
Methylene Chloride (Dichloromethane) (Freon 30)TN	CH ₂ Cl ₂	50ppm	+138	Methylene Chloride	25-3000ppm	1-7	1	
			+51L	Freons(PYR)	1-46ppm	1-2	2	
Methyl Ether	See Dimethyl Ether							
Methyl Ethyl Ketone	CH ₃ COC ₂ H ₆	200ppm	152	Methyl Ethyl Ketone	0.02-0.6%	2	3	
			*151L	Acetone(LR)	21-1680ppm	5	2	
Methyl Glycol Acetate	See Ethylene Glycol Monomethyl Ether Acetate							
Methyl Hydrazine	CH ₃ NHNH ₂	0.2ppm	185	Hydrazine	2-12ppm	5	2	
Methylene Iodide	CH ₂ I ₂	2ppm	+121L	Benzene-(LR)	1-20ppm	5	3	
Methyl Isobutyl Ketone	CH ₃ COCH ₂ CH(CH ₃) ₂	50ppm	153	Methyl Isobutyl Ketone	0.01-0.6%	2	3	
Methyl Mercaptan	CH ₃ SH	0.5ppm	71	Methyl Mercaptan	0.25-70ppm	1-10	3	
			71H	Methyl Mercaptan	50-1650ppm	1/2-1	3	
Methyl Methacrylate	CH ₂ C(CH ₃)COOCH ₃	100ppm	141	Ethyl Acetate	0.005-0.275%	4	3	
			149	Methyl Methacrylate	10-500ppm	1-2	2	
n-Methyl Morpholine	CH ₂ CHOCH ₂ CH ₂ NCH ₃	—	180	Amines	0.5-60ppm	1/2-2	3	
Methyl Propionate	CH ₃ CH ₂ COOCH ₃	—	81	Acetic Acid	0.1-2.3%	5	3	
4-Methyl Pyridine	NCHCHC(CH ₃)CHCH	—	182	Pyridine	0.4-10.5ppm	1	3	
Mineral Spirits	Hydrocarbon Mixture	—	121	Benzene	55-1000ppm	1	3	
Monochlorobenzene	See Chlorobenzene							
Monoethyl Amine	See Methyl Amine							
Monomethyl Amine	See Methyl Amine							

GAS OR VAPOR TO BE MEASURED	CHEMICAL FORMULA	1) TLV-TWA (ACGIH)	2) TUBE NO.	3) DETECTOR TUBE TO BE USED	MEASURABLE CONCENTRATION RANGE	4) PUMP STROKES TAKEN	5) SHELF LIFE (YEAR)	6) SEI TUBE
Monomethyl Aniline	C ₆ H ₅ NHCH ₃	0.5ppm	*181	Aniline	2.5-45ppm	3	1	
Monomethyl Hydrazine	See Methyl Hydrazine							
Monostyrene	See Styrene							
Morpholine	C ₄ H ₉ NO	20ppm	180	Amines	1-60ppm	1/2-2	3	
Napthalene	C ₁₀ H ₈	10ppm	*60	Phenol	0.5-12ppm	2	2	
Nickel Carbonyl	Ni(CO) ₄	0.05ppm	20L	Nickel Carbonyl	10-800ppm	1-4	3	
Nickel Tetracarbonyl	See Nickel Carbonyl							
Nitric Acid	HNO ₃	2ppm	15L	Nitric Acid-(LR)	0.1-40ppm	1/2-10	3	
Nitric Oxide (Also see Nitrogen Oxides)	NO	25ppm	+10	Nitric Oxide	NO:2-200ppm NO ₂ :5-200ppm	1-5	1	
Nitroethane	C ₂ H ₅ NO ₂	100ppm	52	Nitroparaffins(PYR)	2-240	1	1.5	
Nitrogen Dioxide (Also see Nitrogen Oxides)	NO ₂	3ppm	9L +10	Nitrogen Dioxide-(LR) Nitric Oxide	0.5-125ppm NO ₂ :5-200ppm NO ₂ :2-200ppm	1-2	2	✓
Nitrogen Oxides	NO + NO ₂	NO:25ppm NO ₂ :3ppm	+10	Nitrogen Oxide	NO:2-200ppm NO ₂ :5-200ppm	1-5	1	
			11L	Nitrogen Oxides-(LR)	0.08-5ppm	2-4	2	
			11S	Nitrogen Oxides	5-575ppm	1/2-2	1	
			11	Nitrogen Oxides	25-600ppm	1	1	
			11HA	Nitrogen Oxides-(HR)	50-2500ppm	1	1	
Nitromethane	CH ₃ NO ₂	100ppm	52	Nitroparaffins(PYR)	5-300ppm	1	1.5	
Nitroparaffins	See separate entries							
1-Nitropropane	CH ₃ CH ₂ CH ₂ NO ₂	25ppm	52	Nitroparaffins(PYR)	4.2-252ppm	1	1.5	
2-Nitropropane	(CH ₃) ₂ CHNO ₂	10ppm	52	Nitroparaffins(PYR)	3.7-222ppm	1	1.5	
Nitrous Oxide	N ₂ O	50ppm	52	Nitroparaffins(PYR)	50-1000ppm	4	1.5	
n-Nonane	CH ₃ (CH ₂) ₇ CH ₃	200ppm	105	Hydrocarbons, High Class	130-3900ppm	1-2	2	
Octane	C ₈ H ₁₈	300ppm	105	Hydrocarbons, High Class	100-3000ppm	1-2	2	
Olefins (as propylene)	Varied	—	100A	L.P. Gas	0.02 to 8%	1	3	
Organic Gas	See Polytec							
Oxygen	O ₂	—	+31	Oxygen	6-24%	1/2	2	
Ozone	O ₃	0.1ppm	18L	Ozone-(LR)	0.025-3ppm	1-10	3	✓
			18M	Ozone-(MR)	4-400ppm	1/2-5	2	
Pentachloroethane	CHCl ₂ CCl ₂	—	*133L	Perchloroethylene-(LR)	55-310ppm	1	2	
1,2-Pentadiene	CH ₂ CHCHCHCHCl ₃	—	174	Butadiene	250-4000ppm	1	3	
			174L	Butadiene(LR)	85-850ppm	4	2	
Pentamethylene Diamine	NH ₂ (CH ₂) ₅ NH ₂	—	180	Amines	0.5-30ppm	1/2-2	3	
Pentane	C ₅ H ₁₂	600ppm	104	n-Butane	110-1600ppm	1	3	
			105	Hydrocarbons, High Class	90-2701ppm	1-2	2	
Pentenenitrile	CH ₃ CH ₂ CHCHCN	—	193	Pentenenitrile	0.5-15ppm	2-4	1.5	
n-Pentyl Acetate	See n-Amyl Acetate							
Peracetic Acid	CH ₃ COOH	—	81	Acetic Acid	1-80ppm	1/2-2	3	
Perchloroethylene	CCl ₂ CCl ₂	—	*133L	Perchloroethylene-(LR)	0.5-37.5ppm	1/2-2	2	
			*133M	Perchloroethylene-(MR)	2-250ppm	1/2-2	2	
			132Ha	Trichloroethylene-(HR)	20-1300ppm	1/2-2	2	
Petroleum Benzene	Hydrocarbon Mixture	—	106	Hydrocarbons, Petroleum	0.5-28mg/L	1/2-2	3	
Petroleum Ether	Hydrocarbon Mixture	—	161	Ethyl Ether	80-2000mg/m ₃	1	3	
			106	Hydrocarbons, Petroleum	0.5-28mg/L	1/2-2	3	
Petroleum Naptha	Hydrocarbon Mixture	—	106	Hydrocarbons, Petroleum	0.5-28mg/L	1/2-2	3	
Phenol	C ₆ H ₅ OH	5ppm	*60	Phenol	0.4-62.5ppm	1-4	2	
Phosgene	COCl ₂	0.1ppm	*16	Phosgene	0.05-20ppm	1-10	1	
Phosphine	PH ₃	0.3ppm	7J	Phosphine-(HR)	0.00025-0.1% (2.5-1000ppm)	1/2-10	3	
			7	Phosphine	2.5-100ppm	1-4	3	
			7L	Phosphine-(LR)	0.15-5ppm	5-10	3	
			7La	Phosphine-(LR)	0.05-9.5ppm	1-10	2	✓
Phosphine in Acetylene	See Phosphine #7, #7J							
4-Picoline	See 4-Methyl Pyridine							
Piperlyane	See 1,3-Pentadiene							
Polytec	Varied, Hydrocarbons	—	107	Polytec	Qualitative	3	3	
Polytec II	SO ₂ ,H ₂ S,CO	—	25	Polytec II	Qualitative	2	2	
Polytec III	NH ₃ ,H ₂ S Hydrocarbons	—	26	Polytec III	Qualitative	1	2	

GAS OR VAPOR TO BE MEASURED	CHEMICAL FORMULA	1) TLV-TWA (ACGIH)	2) TUBE NO.	3) DETECTOR TUBE TO BE USED	MEASURABLE CONCENTRATION RANGE	4) PUMP STROKES TAKEN	5) SHELF LIFE (YEAR)	6) SEI TUBE
Propane	C ₃ H ₈	—	100B +103	Propane (7) (9) Hydrocarbons, Low Class	0.1-2% 0.05-2.4%	20ml/20min 1/2-2	3 2	
1,2-Propanediol	See 1,2-Propylene Glyco							
Propionaldehyde	C ₂ H ₅ CHO	—	151L	Acetone-(LR)	25-1400ppm	2	2	
Propionic Acid	CH ₃ CH ₂ CO ₂ H	10ppm	81	Acetic Acid	1.5-150ppm	1/2-2	3	
Propionic Aldehyde	See Propionaldehyde							
Propionitrile (Ethyl Cyanide)	CH ₃ CH ₂ CN	5.mg/m ₃	191	Acrylonitrile	100-1000ppm	2-4	2	
n-Propyl Acetate	CH ₃ COOC ₃ H ₇	200ppm	151 145	Acetone n-Propyl Acetate	0.06-0.9% 20-500ppm	2 1-10	3 3	
n-Propyl Alcohol	C ₃ H ₇ OH	200ppm	112 113 113	Ethyl Alcohol (Ethanol) Isopropyl Alcohol Isopropyl Alcohol-(LR)	0.02-0.8% 0.55-2.65% 80-800ppm	2 1 1	3 3 2	
Propyl Aldehyde	See Propionic Aldehyde							
Propyl Amine	C ₃ H ₇ NH ₂	—	180	Amines	1-60ppm	1/2-2	3	
Propyl Cyanide	See Butyronitrile							
Propylene	C ₃ H ₆	—	100A	L.P. Gas (Propylene)	0.02-0.8%	1	3	
Propylene Dichloride	See 1,2-Dichloropropane							
1,2- Propylene Glycol	CH ₃ CHOCH ₂ CH ₂ OH	—	165	Ethylene Glycol	10-85ppm	1-2	2	
Propyleneimine	C ₃ H ₇ N	2ppm	180	Amines	1-60ppm	1/2-2	3	
Propylene Oxide	C ₃ H ₆ O	20ppm	163 163L	Ethylene Oxide Ethylene Oxide-(LR)	0.3-3.6% 0.4-100	1 2-4	3 1	
n-Propyl Mercaptan	C ₃ H ₇ SH	—	70	Mercaptans	2-540ppm	1-10	3	
Pyridine	C ₅ H ₅ N	5ppm	182	Pyridine	0.2-35ppm	1/2-2	3	
Refrigerants	See Fluorochlorocarbons							
Smoke Tubes	—	—	501	For use in Air Flow Indicator Kit & Qualitative Respiratory Fit Testing (9)				
Stoddard Solvent	Hydrocarbon Mixture	100ppm (575mg/m ₃)	128	Stoddard Solvent	100-8000mg/m ₃	1	3	
Styrene (Monostyrene)	C ₆ H ₅ CHCH ₂	50ppm	124 124L	Styrene Styrene-(LR)	10-1000ppm 2-100ppm	1/2-2 1-4	3 3	
Sulfur Dioxide (See also Hydrogen Sulfide/Sulfur Dioxide)	SO ₂	2ppm	5H 5M 5L 5La 5Lb 5Lc	Sulfur Dioxide-(HR) Sulfur Dioxide-(MR) Sulfur Dioxide-(LR) Sulfur Dioxide-(LR) Sulfur Dioxide-(LR) Sulfur Dioxide in Carbon Dioxide-(LR)	0.05-8.0% 20-3600ppm 1.25-200ppm 0.5-60ppm 0.05-10ppm 0.1-26ppm	1/2-10 1/2-4 1/2-4 1-8 1-8 1-4	3 3 3 3 3 2	
1,1,2-tetrabromoethane	CHBr ₂ CHBr ₂	—	+135	Methylchloroform(LR)	0.5-9ppm	3	2	
Tetrachlorodifluoroethane (Fluorochlorocarbon 112)	CCl ₂ FCCl ₂ F	500ppm	+51H +51 +51L	Fluorochlorocarbons (HR)(PYR) Fluorochlorocarbons (PYR) Fluorochlorocarbons (LR)(PYR)	125-1000ppm 7-280ppm 1-60ppm	1 1 1-2	2 2 2	
1,1,2,2-Tetrachloroethane	Cl ₂ CHCHCl ₂	1ppm	*+131La +131L	Vinyl Chloride-(LR) Vinyl Chloride(LR)	3-75ppm 4-80ppm	4 4	2 2	
Tetrachloroethylene	See Perachloroethylene							
Tetrachloromethane	See Carbon Tetrachloride							
1,1,2,2-Tetrafluoroethane (Fluorochlorocarbon HCFC 134C)	CH ₂ FCF ₃	—	81	Acetic Acid(PYR)	600-12,000ppm	1	2	
Tetrahydrofuran	C ₄ H ₈ O	200ppm	161 159	Ethyl Ether Tetrahydrofuran	0.01-0.8% 20-800ppm	2-5 1-2	3 2	
Tetramethylenediamine	NH ₂ (CH ₂) ₄ NH ₂	—	180	Amines	0.5-30ppm	1/2-2	3	
Thioglycol	See 2-Mercaptoethanol							
Thionyl Chloride	SOCl ₂	1ppm	5La	Sulfur Dioxide-(LR)	1-25ppm	2	3	
Toluene	C ₆ H ₅ CH ₃	100ppm	161 122 122L	Ethyl Ether (Ether) Toluene Toluene-(LR)	0.02-0.85% 5-600ppm 1-100ppm	1 1/2-2 1-4	3 3 3	√
O-Toluidine	CH ₃ C ₆ H ₄ NH ₂	2ppm	*181	Aniline	2.5-35ppm	3	1	
Tribromoethane	See Bromoform							
Trichloroacetic Acid	CCl ₃ COOH	1ppm	15L	Nitric Acid(LR)	1-37.5ppm	1	3	

