

ALPHABETICAL DETECTOR TUBE LIST

Model #	Description	Model #	Description
AP-20	Air sampling pump kit includes carrying case, 2 tube connectors, lubricant, and instructions	111U(1)	Butyl ether, 10-1000 ppm
AS-1	Air flow indicator kit for spot test with one box of No.300 tube	130U	tert-Butyl mercaptan, 0.5-10 ppm
B-190	Standard tube tip cutter vial	111U(2)	Butyl methacrylate, 10-1000 ppm
BK-346	Breathing air analysis kit, CGA 346	111U(3)	tert-Butyl methyl ether, 10-1000 ppm
BK-590	Breathing air analysis kit, CGA 590	216S	Butyric acid, 3-60 ppm
BK-P4M	Breathing air analysis kit, 1/4" NPT-M	126B	Carbon Dioxide, 0.01-0.7%
SA-10-AP20	One-hand operation switch with for AP-20 pump	126SA	Carbon dioxide, 0.1-5.2%
BOOK	Kitagawa detector tube handbook	126SB	Carbon dioxide, 0.05-1.0%
DETECTOR TUBES 10 tubes per box except as noted			
133A	Acetaldehyde, 0.004-1.0% (concentration chart method)	126SF	Carbon dioxide, 100-4000 ppm
133SB	Acetaldehyde, 5-140 ppm	126SG	Carbon dioxide, 0.02-1.4%
216S	Acetic Acid, 1-50 ppm	126SH	Carbon dioxide, 1-20%
216S	Acetic anhydride, 1-15 ppm	126UH	Carbon Dioxide, 5-50%
102SA	Acetone, 0.1-5.0%; Tetrahydrofuran	141SA*	Carbon disulfide, 30-500 ppm
102SC	Acetone, 0.01-4.0%	141SB*	Carbon disulfide, 0.8-50 ppm
102SD	Acetone, 20-5000 ppm	100	Carbon monoxide, 5-1000 ppm (concentration chart method)
101S	Acetylene, 50-1000 ppm	106B	Carbon monoxide in the presence of ethylene, 10-1000 ppm
280S*	Acetylene-Ethylene, C ₂ H ₂ 20-300 ppm; C ₂ H ₄ 200-2000 ppm	106C	Carbon monoxide in the presence of ethylene and nitrogen oxides, 10-1000 ppm
136	Acrolein, 0.005-1.8%	106S	Carbon monoxide, 10-250 ppm
216S	Acrylic acid, 1-50 ppm	106SA	Carbon monoxide, 5-2000 ppm
128SA	Acrylonitrile, 0.1-3.5%	106SC	Carbon monoxide, 1-50 ppm
128SB	Acrylonitrile, 10-500 ppm	106SH	Carbon monoxide, 0.1-2.0%
128SC	Acrylonitrile, 1-120 ppm	106SS	Carbon monoxide, 30-500 ppm
128SD	Acrylonitrile, 0.2-20 ppm	106UH	Carbon monoxide, 0.1-20%
300	Air flow indicator tube	147S*	Carbon tetrachloride, 0.5-60 ppm
184S	Allyl alcohol, 10-160 ppm	239S*	Carbonyl sulfide, 5-60 ppm
132SC(1)*	Allyl chloride, 0.1-12.0 ppm	109SA	Chlorine, 1-40 ppm
105SA	Ammonia, 0.5-10%	109SB	Chlorine, 0.1-10.0 ppm
105SB	Ammonia, 50-900 ppm	109U	Chlorine, 0.05-2 ppm
105SC	Ammonia, 5-260 ppm	116	Chlorine dioxide, 1-20 ppm
105SE	Ammonia, 1-200 ppm	178SB*	Chlorobenzene, 1-140 ppm
105SD	Ammonia, 0.2-20 ppm	152S*	Chloroform, 23-500 ppm
105SH	Ammonia, 0.5-30%	172S*	Chloropicrin, 0.05-16.0ppm
105SM	Ammonia, 0.1-1.0%	169S*	Chloroprene, 0.5-20 ppm
181S	Aniline, 1-30 ppm	132SC(3)*	m-Chlorotoluene, 0.1-12.0 ppm
140SA	Arsine, 5-160 ppm	132SC(4)*	o-Chlorotoluene, 0.1-12.0 ppm
121U	Arsine, Phosphine, 0.05-2.0 ppm	132SC(5)*	p-Chlorotoluene, 0.1-12.0 ppm
190U(6)	Benzaldehyde, 5-500 ppm	183U	Cresol, 0.5-25.0 ppm
118SB*	Benzene, 5-200 ppm	190U(1)	Crotonaldehyde, 5-500 ppm
118SC	Benzene, 1-100 ppm	111U(4)	Cumene, 10-1000 ppm
118SD*	Benzene, 0.1-75 ppm	115S	Cyclohexane, 0.01-0.6%
118SE*	Benzene, 0.2-80 ppm	206U	Cyclohexanol, 5-500 ppm
132SC(2)*	Benzyl chloride, 0.1-12.0 ppm	197U	Cyclohexanol, 2-100 ppm
114	Bromine, 1-20 ppm	197U(1)	Cyclohexanone, 2-100 ppm
157SB(1)	Bromochloromethane, 0.4-80 ppm	111U(5)	Cyclohexene, 10-1000 ppm
157SB(2)	Bromoform, 0.4-80 ppm	105SD	Cyclohexylamine, 1-20 ppm
168SA	Butadiene, 0.03-2.6%	111U(6)	Decahydronaphthalene, 10-1000 ppm
168SB	Butadiene, 30-600 ppm	111U(7)	n-Decane, 10-1000 ppm
168SC	Butadiene, 2.5-100 ppm	190U	diacetone alcohol, 10-250 ppm
168SD*	Butadiene, 0.5-10.0 ppm	242S	Diborane, 0.02-5.0 ppm
221SA	n-Butane, 0.05-0.6%	105SD	Dibutylamine, 2-20 ppm
190U	1-Butanol, 5-100 ppm	214S	o-Dichlorobenzene, 5-100 ppm
189U	2-Butanol, 4-300 ppm	215S	p-Dichlorobenzene, 10-150 ppm
138U	Butyl acetate, 10-400 ppm	235S*	1,1-Dichloroethane, 10-160 ppm
139SB	Butyl acetate, 0.01-1.0%	230S*	1,2-Dichloroethane, 5-50 ppm
211U	Butyl acrylate, 5-60 ppm	223S*	2,2-Dichloroethyl ether, 2-30 ppm
105SD	Butylamine, 1-20 ppm	132SC(6)*	1,1-Dichloroethylene, 0.1-12.0 ppm
190U	Butyl cellosolve, 10-1000 ppm	145S*	1,2-Dichloroethylene, 5-400 ppm
		180S*	Dichloromethane, 10-1000 ppm
		157SB(3)	1,2-Dichloropropane, 0.4-80 ppm

ALPHABETICAL DETECTOR TUBE LIST *CONTINUED*

Model #	Description	Model #	Description
132SC(7)*	1,3-Dichloropropane, 0.1-12.0 ppm	120SB	Hydrogen sulfide, 0.75-300 ppm
194S*	1,3-Dichloropropane, 10-500 ppm	120SC	Hydrogen sulfide, 0.005-0.16%
190U(2)	Dicyclopentadiene, 5-500 ppm	120SD	Hydrogen sulfide, 1-60 ppm
222S*	Diethyl amine, 1-20 ppm	120SE	Hydrogen sulfide, 0.5-40 ppm
111U(8)	Diethyl benzene, 10-1000 ppm	120SF	Hydrogen sulfide, 25-2000 ppm
107SA	Diethyl ether, 0.04-1.4%	120SH	Hydrogen sulfide, 0.1-4.0%
107U	Diethyl ether, 20-400 ppm	120SM	Hydrogen sulfide, 0.05-1.2%
105SD	Diisopropyl amine, 1-16 ppm	120U	Hydrogen sulfide, 0.2-6.0 ppm
229S	N,N-Dimethylacetamide, 5-70 ppm	120UH	Hydrogen sulfide, 2-20%
227S	Dimethyl amine, 1-20 ppm	120UT	Hydrogen sulfide, 2.5-40%
105SD	N,N-Dimethylaniline, 0.5-9 ppm	282S	Hydrogen sulfide-Mercaptans, H2S 1-30 ppm; R•SH 0.5-5 ppm
123S	Dimethyl ether, 0.01-1.2%	131	Inorganic gas qualitative detector tube
196S	N,N-Dimethylformamide, 1-30 ppm	139SB	Isobutyl acetate, 0.01-1.4%
119U	Dioxane, 20-1000 ppm	153U	Isobutyl acetate, 10-400 ppm; Naphthalene
139SB	Dioxane, 0.05-2.5%	211U	Isobutyl acrylate, 5-60 ppm
192S*	Epichlorohydrine, 5-50 ppm	208U	Isobutyl alcohol, 5-100 ppm
111SA	Ethyl acetate, 0.1-5.0%	113SB	Isobutylene, 0.03-2.0%
111U	Ethyl acetate, 10-1000 ppm	216SC	Isobutyric acid, 3-50 ppm
104SA	Ethyl alcohol, 0.05-5.0%	188U	Isopentyl acetate, 10-400 ppm
227S	Ethylamine, 1-20 ppm	209U	Isopentyl alcohol, 5-100 ppm
179S	Ethyl benzene, 10-500 ppm	190U	Isoprene, 1-16 ppm
157SB(4)	Ethyl bromide, 0.4-80 ppm	139SB	Isopropyl acetate, 0.01-1.2%
190U	Ethyl cellosolve, 5-500 ppm	122SA	Isopropyl alcohol, 0.05-2.5%
190U	Ethyl cellosolve acetate, 5-150 ppm	111U	Isopropyl acetate, 10-1000ppm
108B	Ethylene, 0.1-100 ppm (color intensity)	150U	Isopropyl alcohol, 20-1200 ppm
108SA	Ethylene, 20-1200 ppm	222S(1)	Isopropylamine, 1-20 ppm
166S*	Ethylene dibromide, 1-50 ppm	190U(3)	Isopropyl cellosolve, 5-500 ppm
232SA*	Ethylene glycol, 20-250 mg/m ³	111U(9)	Isopropyl ether, 10-1000 ppm
232SB*	Ethylene glycol, 3-40 mg/m ³	130U	isopropyl mercaptan, 0.5-10 ppm
122SA	Ethylene oxide, 0.01-4.0%	216S	Isovaleric acid, 3-50 ppm
122SC*	Ethylene oxide, 1-15 ppm	216S	Maleic anhydride, 0.2-10 ppm
122SL	Ethylene oxide, 50-2600 ppm	142S	Mercury vapor, 0.1-10 mg/m ³
122SD*	Ethylene oxide, 0.1-14.0 ppm	190U	Mesityl oxide, 5-100 ppm
122SM	Ethylene oxide, 5-100 ppm	216S	Methacrylic acid, 1-50 ppm
165SA	Ethyl mercaptan, 1-160 ppm	111SA	Methyl acetate, 0.1-5.0%
165SB	Ethyl mercaptan, 2.5-80 ppm	211U	Methyl acrylate, 5-60 ppm
130U	Ethyl mercaptan, 0.5-10 ppm	119SA	Methyl alcohol, 0.05-6.0%
111U(8)	Ethyl methacrylate, 10-1000 ppm	119U	Methyl alcohol, 20-1000 ppm
171SA*	Formaldehyde, 20-1500 ppm	227S	Methylamine, 1-20 ppm
171SB*	Formaldehyde, 1-35 ppm	105SD	n-Methyl aniline, 0.5-6 ppm
171SC	Formaldehyde, 0.05-4.0 ppm	157JS	Methyl bromide, 3-70 g/m ³
216S	Formic acid, 1-50 ppm	157SA	Methyl bromide, 10-500 ppm
122SA	Furan, 0.01-4.0%	157SB	Methyl bromide, 0.4-80 ppm
238S	Furfuryl alcohol, 2-25 ppm	237S(1)	Methyl butyl ketone, 5-120 ppm
110S	Gasoline, 0.05-0.6%	190U	Methyl Cellosolve, 5-500 ppm
187S	General hydrocarbons, 50-1400 ppm	160S	Methyl chloroform, 15-400 ppm
113SB	Heptane, 100-2000 ppm	113SB	Methyl cyclohexane, 100-1600 ppm
113SA	n-Hexane, 0.05-1.32%	199U	Methyl cyclohexanol, 5-200 ppm
113SB	n-Hexane, 50-1400 ppm	198U	Methyl cyclohexanone, 2-100 ppm
113SC	n-Hexane, 5-800 ppm	122SA	Methyl ethyl ketone, 0.05-5.0%
219S	Hydrazine, 0.05-10 ppm	139SB	Methyl ethyl ketone, 0.01-1.4%
137U	Hydrogen, 0.05-0.8%	139U	Methyl ethyl ketone, 20-1500 ppm
173SA*	Hydrogen chloride, 20-1200 ppm	176S*	Methyl iodide, 2-40 ppm
173SB*	Hydrogen chloride, 0.4-40 ppm	122SA	Methyl isobutyl ketone, 0.01-0.6%
112SA	Hydrogen cyanide, 0.01-3.0%	155U	Methyl isobutyl ketone, 5-300 ppm
112SB	Hydrogen cyanide, 0.5-100 ppm	111U(10)	Methyl isothiocyanate, 10-1000 ppm
112SC*	Hydrogen cyanide, 0.3-8 ppm	164SA	Methyl mercaptan, 5-140 ppm
156S	Hydrogen fluoride, 0.17-30 ppm	164SH	Methyl mercaptan, 50-1000 ppm
247S	Hydrogen peoxide, 0.5-10.0 ppm	130U	Methyl mercaptan, 0.5-10 ppm
167S	Hydrogen selenide, 1-600 ppm	184S	Methyl methacrylate, 10-160 ppm
120GR	Hydrogen sulfide, 0.025-0.4 gr/100 cf	193S	Methyl styrene, 10-500 ppm
120GT	Hydrogen sulfide, 0.25-4 gr/100 cf		

ALPHABETICAL DETECTOR TUBE LIST CONTINUED

Model #	Description	Model #	Description
111U(11)	Mineral turpentine, 10-1000 ppm	103SF*	Sulfur dioxide in flue gas, 0.02-.03%
224SA	Monoethanol amine, 0.5-50 ppm	244U	Sulphuric acid, 0.5-5 mg/m ³
105SD	Morpholine, 2-22 ppm	135SA	Tetrachloroethylene, 5-300 ppm
153U	Naphthalene, 10-100 ppm	135SB	Tetrachloroethylene, 0.2-10 ppm
129	Nickel carbonyl, 20-700 ppm	135SG	Tetrachloroethylene, 0.1-2.0%
233S	Nitric acid vapor, 1-20 ppm	135SM	Tetrachloroethylene for process control, 50-1250 ppm
117SA	Nitrogen dioxide, 20-1000 ppm	243U	Tetraethoxysilane, 5-200 ppm
117SB	Nitrogen dioxide, 0.5-30.0 ppm	102SA	Tetrahydrofuran, 0.2-5.0%
117SD*	Nitrogen dioxide, 0.1-1.0 ppm	162U	Tetrahydrofuran, 20-400 ppm
174A	Nitrogen oxide and dioxide, NO 10-300 ppm; NO ₂ 1-40 ppm	190U(5)	Tetrahydrothiophen, 5-500 ppm
174B*	Nitrogen oxide and dioxide, NO 10-300 ppm; NO ₂ 1-40 ppm	124SA	Toluene, 10-500 ppm
175SA	Nitrogen oxides, 20-250 ppm	124SB	Toluene, 2-100 ppm
175SH	Nitrogen oxides, 100-2500 ppm	124SH	Toluene, 100-3000 ppm
175U	Nitrogen oxides, 0.5-30 ppm	105SD	o-Toluidine, 2-22 ppm
111U(12)	n-Nonane, 10-1000 ppm	105SD	p-Toluidine, 2-20 ppm
186	Organic gas checker	236S*	1,1,2-Trichloroethane, 10-100 ppm
186B	Organic gas qualitative detector tube	236S(1)*	1,1,2-Trichloroethane, 10-100 ppm
159SA*	Oxygen, 2-24%	134SA	Trichloroethylene, 5-300 ppm
159SB*	Oxygen, 2-24% (for explosion hazard areas)	134SB	Trichloroethylene, 0.2-36.8 ppm
159SC*	Oxygen, 1.5-24% (non-heating type)	134SG	Trichloroethylene, 0.05-2.0%
281S*	Oxygen, O ₂ 2-10%; CO ₂ 1-20% (separation measurement)	132SC(8)*	Trichlorotoluene, 0.1-12.0 ppm
182SA	Ozone, 50-1000 ppm	213S	Triethylamine, 1-20 ppm
182SB	Ozone, 2.5-100 ppm	222S	Trimethylamine, 1-20 ppm
182U	Ozone, 0.025-3.0 ppm	111U	1,2,4-Trimethyl benzene, 10-1000 ppm
113SB	Pentane, 50-1000 ppm	113SB	2,2,4 Trimethyl pentane, 100-4000 ppm
210U	Pentyl acetate, 10-200 ppm	216S	n-Valeric acid, 3-70 ppm
105SD	Pentylamine, 2-22 ppm	237S	Vinyl acetate, 5-120 ppm
183U	Phenol, 0.5-25.0 ppm	132SA	Vinyl chloride, 0.05-1.0%
146S	Phosgene, 0.1-20 ppm	132SB	Vinyl chloride, 5-500 ppm
121SA	Phosphine in acetylene, 20-800 ppm	132SC	Vinyl chloride, 0.1-12.0 ppm
121SB	Phosphine in acetylene, 5-90 ppm	177SA	Water vapor, 1.7-33.8 mg/L
121SC	Phosphine, 20-1400 ppm	177U	Water vapor, 0.05-2.0 mg/L
121SD	Phosphine, 0.25-20.0 ppm	177UL	Water vapor, 3-80 LB/MMCF
121SH	Phosphine, 100-3200 ppm	177UR	Water vapor, 2-12 LB/MMCF
121U	Phosphine, 0.05-2.0 ppm	143SA	Xylene, 5-1000 ppm
121SS	Phosphine for fumigation, 200-6000 ppm	143SB	Xylene, 5-200 ppm
125SA	Propane, 0.02-0.5%	*Each box contains tubes for 5 measurements	
190U(4)	1-Propanol, 5-500 ppm	COMPRESSED BREATHING AIR TEST TUBES	
216SC	Propionic acid 3-50 ppm	600SP	Carbon monoxide - Breathing air, 5-100 ppm
139SB	Propyl acetate, 0.01-1.4%	601SP	Carbon dioxide - Breathing air, 100-3000 ppm
151U	Propyl acetate, 20-1000 ppm	602SP	Oil mist - Breathing air, 0.3-5 mg/m ³
105SD	Propylamine, 1-20 ppm	603SPA	Water vapor - Breathing air, 20-160 mg/m ³
185S	Propylene, 50-1000 ppm	604SP**	Oxygen - Breathing air, 2-24%
122SC(2)	Propylene glycol, 1-15 ppm	**A 50 ml plastic syringe and a 1 meter vinyl tube are optionally necessary.	
163SA	Propylene oxide, 0.05-5.0%	DETECTOR TUBES FOR DISSOLVED SUBSTANCES IN SOLUTION	
122SC(1)	Propylene oxide, 1-15 ppm	10 tubes per box	
219S(1)	Pyridine, 0.05-10 ppm	200SA	Sulphide ion, 2-1000 ppm
105SD	Pyridine, 0.5-10 ppm	200SB	Sulphide ion, 0.5-10 ppm
240S	Silane, 0.5-50 ppm	201SA	Chloride ion, 10-2000 ppm
158S	Styrene, 2.5-300 ppm	201SB	Chloride ion, 3-200 ppm
158S(1)	Styrene, 2.5-300 ppm	203S	Copper ion, 1-100 mg/L
158SB*	Styrene, 1-100 ppm	204S	Cyanide ion, 0.2-5 ppm
103SA	Sulfur dioxide, 0.1-3.0%	205SL	Salinity, 0.01-0.8%
103SB	Sulfur dioxide, 0.02-0.3%	234SA	Free residual chlorine, 0.4-5 ppm
103SC	Sulfur dioxide, 20-300 ppm		
103SD	Sulfur dioxide, 1-60 ppm		
103SE	Sulfur dioxide, 0.25-10 ppm		
103SF	Sulfur dioxide, 0.02-0.3%		
103SG	Sulfur dioxide in Carbon dioxide, 0.1-25 ppm		

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