



**Environmental**  
Remediation Equipment Inc.™

**SENSIDYNE**  
Industrial Health & Safety Instrumentation

# Gas detection Tubes

## A FREE SENSIDYNE PISTON PUMP

in exchange for any  
competitive pump and  
with a purchase  
of 12 boxes  
of tubes



### INDUSTRIAL

- Metal Fabrication
- Degreasing
- Welding
- Sewage & Waste Water Treatment etc...



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- Aerospace Manufacturing
- Hazardous Waste Handling
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**CLICK FOR  
COMPLETE  
LIST OF TUBES**

# Detector Tube Selection

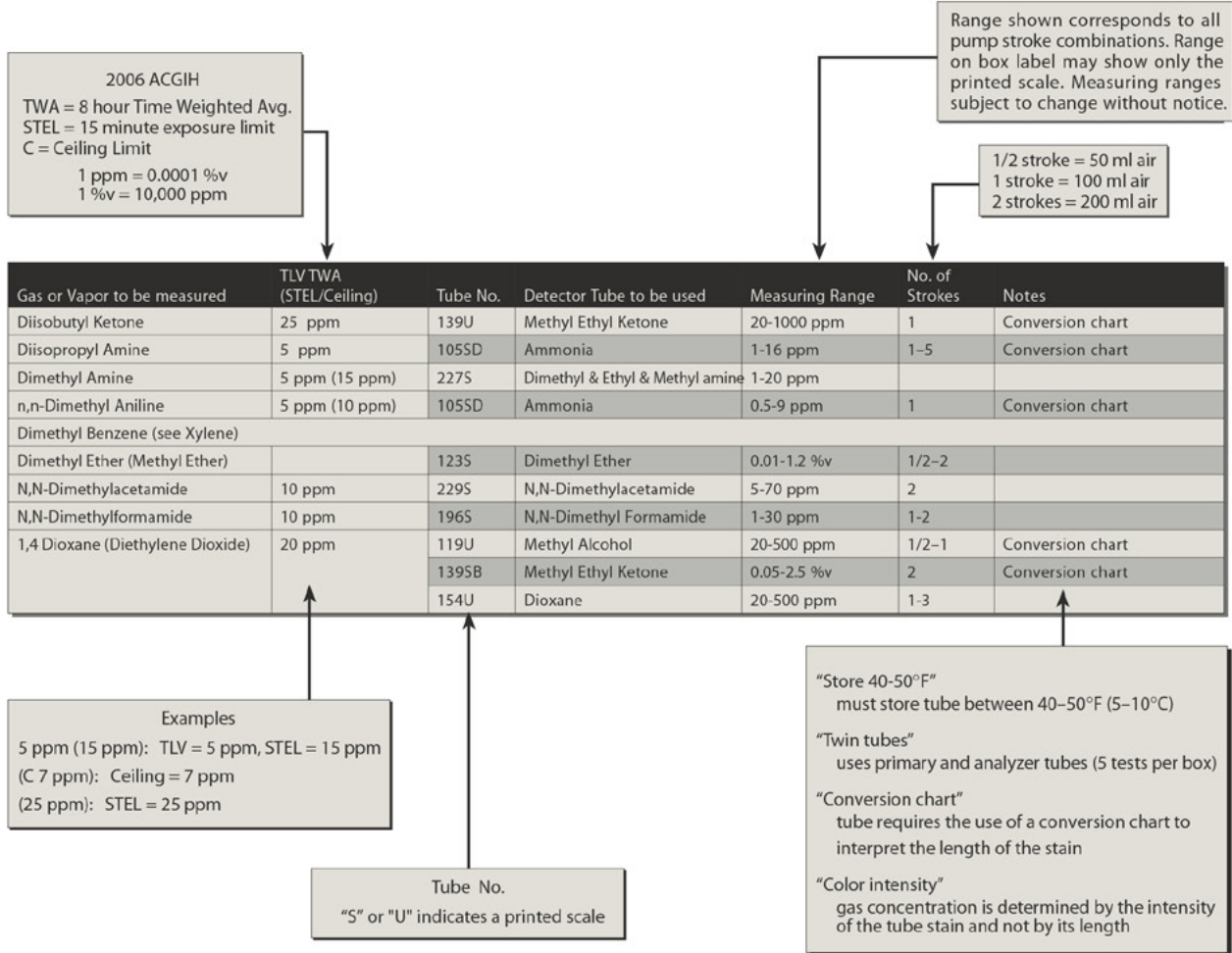


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# How to Use This Guide



## IMPORTANT Read These Warnings First

Detector tubes and detector pumps are designed, manufactured and calibrated together to form a unit. System accuracy depends not only on stroke volume, but also on the suction characteristics of the pump. Mixing certain pump and tube brands has been shown to cause erroneous results and should not be practiced. Use only with pumps specified by Sensidyne.

The selection guide contains general descriptions of detector tubes for use only with Sensidyne sampling pumps. This guide includes a list of hazardous substances that can be detected. However, under no circumstances should the product be used except by qualified, trained personnel and not until the instructions, labels, warnings, precautions, and other literature accompanying them have been carefully read, understood, and followed. Only they contain the complete and detailed information concerning these products.

Read and understand all applicable Federal, state, and local health and safety laws and regulations, including OSHA, and ensure you are in complete compliance with said laws and regulations before using this product. Read and understand all instructions before using this product.

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# Colorimetric Gas Detector Tubes

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
Acetaldehyde	(C 25 ppm)	133SB	Acetaldehyde	5 - 140 ppm	1	Store 40-50° F
Acetaldehyde – Concentration Chart Method	(C 25 ppm)	133A	Acetaldehyde	0.004 - 1.0%v	1	Store 40-50° F
Acetic Acid	10 ppm (15 ppm)	216S	Acetic Acid	1 - 50 ppm	1	
Acetic Anhydride	5 ppm	216S	Acetic Acid	1 - 15 ppm	1	Conversion chart
Acetone	500 ppm (750 ppm)	102SA	Acetone	0.1 - 5.0%v	1/2-1	
Acetone	500 ppm (750 ppm)	102SC	Acetone	0.01 - 4.0%v	1	
Acetone	500 ppm (750 ppm)	102SD	Acetone	20 - 5,000 ppm	1/2-2	
Acetylene	asphyx	101S	Acetylene	50 - 1,000 ppm	1	
Acetylene+Ethylene		280S	Acetylene+Ethylene	"A: 20-300 ppm, E: 200-2000 ppm"	1	Twin Tubes
Acetylene+Ethylene – Separation Measurement		280S				
Acrolein – Concentration Chart Method	(C0.1 ppm)	136	Acrolein	0.005 - 1.8%v	1	Store 40-50° F
Acrylic Acid	2 ppm	216S	Acetic Acid	1 - 50 ppm	1	Conversion chart
Acrylonitrile	2 ppm	128SA	Acrylonitrile	0.1 - 3.5%v	1	
Acrylonitrile	2 ppm	128SB	Acrylonitrile	10 - 500 ppm	1	
Acrylonitrile	2 ppm	128SC	Acrylonitrile	1 - 120 ppm	2	Store 40-50° F, twin tubes
Acrylonitrile	2 ppm	128SD	Acrylonitrile	0.25 - 20 ppm	1-4	Store 40-50° F, twin tubes
Allyl Alcohol	0.5 ppm	184S	"Methyl Methacrylate & Allyl Alcohol"	20 - 500 ppm	1	Conversion chart
Allyl Chloride	1ppm (2 ppm)	132SC	Vinyl Chloride	1 - 40 ppm	3	Twin tubes, Conversion chart
Ammonia	25 ppm (35 ppm)	105SA	Ammonia	0.5 - 10%v	1	
Ammonia	25 ppm (35 ppm)	105SB	Ammonia	50 - 900 ppm	1	
Ammonia	25 ppm (35 ppm)	105SC	Ammonia	5 - 260 ppm	1-2	
Ammonia	25 ppm (35 ppm)	105SD	Ammonia	0.2 - 20 ppm	1-5	
Ammonia		105SE		1 - 200 ppm		
Ammonia	25 ppm (35 ppm)	105SH	Ammonia	0.5 - 30%v	1	
Ammonia	25 ppm (35 ppm)	105SM	Ammonia	0.1 - 1.0%v	1	
Aniline	2 ppm	181S	Aniline	1 - 30 ppm	1-2	
a-Pinene		158S		20 - 300 ppm		Conversion chart
Arsine	0.05 ppm	121U	Phosphine & Arsine	0.05 - 2.0 ppm	1-2	
Arsine	0.05 ppm	140SA	Arsine	5 - 160 ppm	1	
1,3-Butadiene	2 ppm	168SA	Butadiene	0.03 - 2.60%v	1	Conversion chart
1,3-Butadiene	2 ppm	168SB	Butadiene	30 - 600 ppm	1	
1,3-Butadiene	2 ppm	168SC	Butadiene	2.5 - 100 ppm	1-2	
1,3-Butadiene	2 ppm	168SE	Butadiene	0.1 - 10.0 ppm		
1-Bromopropane		157SA		10 - 500 ppm		
1-Bromopropane		157SB		5 - 80 ppm		
1-Butanol	20 ppm	190U	Ethyl & Methyl Cellosolve	5 - 100 ppm	3	Conversion Chart
2-Bromopropane		157SA		10 - 500 ppm		
2-Bromopropane		157SB		5 - 80 ppm		
2-Butanol	100 ppm	189U	2-Butanol	4 - 300 ppm	2-4	
Benzaldehyde		190U		5 - 70 ppm		
Benzene	0.5 ppm (2.5 ppm)	118SC	Benzene	1 - 100 ppm	1-4	
Benzene	0.5 ppm (2.5 ppm)	118SD	Benzene	0.1 - 75 ppm	1-10	Twin tubes

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
Benzene – In Presence Of Gasoline And/ Or Other Aromatic Hydrocarbons	0.5 ppm (2.5 ppm)	118SB	Benzene-In Presence Of Hydrocarbons	5 - 300 ppm	1	Twin tubes
Benzene – In Presence Of Gasoline And/ Or Other Aromatic Hydrocarbons	0.5 ppm (2.5 ppm)	118SE	Benzene-In Presence Of Hydrocarbons	0.2 - 80 ppm	1	Twin tubes
Benzyl Chloride	1 ppm	132SC	Vinyl Chloride	1 - 16 ppm	1-5	Twin tubes, Conversion chart
Bromine – Concentration Chart Method	0.1 ppm (0.2 ppm)	114	Bromine	1 - 20 ppm	1	
Bromochloromethane	200 ppm	157SB	Methyl Bromide	5 - 400 ppm	1/2-1	Store 40-50° F, twin tubes, conversion chart
Bromoform	0.5 ppm	157SB	Methyl Bromide	0.5 - 20 ppm	1-2	Store 40-50° F, twin tubes, conversion chart
Butyl Acetate	150 ppm (200 ppm)	138U	Butyl Acetate	10 - 400 ppm	1	
Butyl Acetate	150 ppm (200 ppm)	139SB	Methyl Ethyl Ketone	0.01 - 1.0%v	2	Conversion chart
Butyl Acrylate	2 ppm	211U	Ethyl & Butyl Isobutyl Acrylate	2 - 60 ppm	2	
Butyl Amine	(C 5 ppm)	105SD	Ammonia	1 - 20 ppm	1	Conversion chart
Butyl Cellosolve (Ethylene Glycol Mono- butyl Ether, 2-Butoxyethanol)	20 ppm	190U	Ethyl & Methyl Cellosolve	10 - 1000 ppm	3	Conversion chart
Butyl Ether		111U	Isopropyl & Ethyl Acetate	10 - 1,200 ppm	1	Conversion chart
Butyl Methacrylate		111U	Isopropyl & Ethyl Acetate	20 - 1,000 ppm	1	Conversion chart
Butyric Acid		216S	Acetic Acid	3 - 60 ppm	1	Conversion chart
N-Butane		221SA		0.05 - 0.60%v		
N-Butyl Amine		105SD		1 - 20 ppm		Conversion chart
Carbon Dioxide	"5000 ppm (30,000 ppm)"	126SA	Carbon Dioxide	0.1 - 5.2%v	1	
Carbon Dioxide	"5000 ppm (30,000 ppm)"	126SB	Carbon Dioxide	0.05 - 1.0%v	1	
Carbon Dioxide	"5000 ppm (30,000 ppm)"	126SF	Carbon Dioxide	100 - 4,000 ppm	1/2-1	
Carbon Dioxide	"5000 ppm (30,000 ppm)"	126SG	Carbon Dioxide	0.02 - 1.40%v	1/2-1	
Carbon Dioxide – Concentration Chart Method		126B		0.01 - 0.70%v		Uses chart
Carbon Dioxide – Extra High Range		126SH		1 - 20%v		
Carbon Dioxide – Ultra High Range		126UH		5 - 50%v		
Carbon Disulphide	1 ppm	141SA	Carbon Disulfide	30 - 500 ppm	1	Store 40-50° F, twin tubes
Carbon Disulphide	1 ppm	141SB	Carbon Disulfide	0.8 - 50 ppm	2-4	Store 40-50° F, twin tubes
Carbon Monoxide	25 ppm	106S	Carbon Monoxide	10 - 250 ppm	3	
Carbon Monoxide	25 ppm	106SA	Carbon Monoxide	5 - 2,000 ppm	1-4	
Carbon Monoxide	25 ppm	106SC	Carbon Monoxide	1 - 50 ppm	1	
Carbon Monoxide	25 ppm	106SH	Carbon Monoxide	0.1 - 2.0%v	1	
Carbon Monoxide	25 ppm	106SS	Carbon Monoxide	30 - 500 ppm		
Carbon Monoxide – In Presence Of Ethyl- ene & Nitrogen Oxides, Colour Intensity		106C		10 - 1,000 ppm		
Carbon Monoxide – Ultra High Range		106UH		0.1 - 20%v		
Carbon Tetrachloride	5 ppm (10 ppm)	147S	Carbon Tetrachloride	5 - 60 ppm	1	Twin Tubes
Carbonyl Sulphide		239S	Carbonyl Sulfide	5 - 60 ppm	1	Twin Tubes
Chlorine	0.5 ppm (1 ppm)	109SA	Chlorine	1 - 40 ppm	1	
Chlorine	0.5 ppm (1 ppm)	109SB	Chlorine	0.1 - 10.0 ppm	1-5	
Chlorine	0.5 ppm (1 ppm)	109U	Chlorine	0.05 - 2 ppm	1-2	
Chlorine Dioxide – Concentration Chart Method	0.1 ppm (0.3 ppm)	116	Chlorine Dioxide	1 - 20 ppm	1	
Chlorobenzene	10 ppm	178SB	Chlorobenzene	1 - 140 ppm	1-5	Twin Tubes
Chloroform	10 ppm	152S	Chloroform	23 - 500 ppm	2-4	Store 40-50° F, twin tubes
Chloropicrin		169S		0.5 - 20 ppm		
Chloropicrin	0.1 ppm	172S	Chloropicrin	0.05 - 16 ppm	1-2	Twin Tubes

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
Cresol	5 ppm	183U	Phenol & Cresol	0.5 - 25.0 ppm	2	
Crotonaldehyde	(C 0.3 ppm)	190U	Ethyl & Methyl Cellosolve	2 - 40 ppm	3	Conversion chart
Cumene	50 ppm	111U	Isopropyl & Ethyl Acetate	20 - 140 ppm	1	Conversion chart
Cyclohexane	100 ppm	115S	Cyclohexane	0.01 - 0.60%v	1	
Cyclohexanol	50 ppm	206U	Cyclohexanol	5 - 500 ppm	2	
Cyclohexanone	20 ppm	197U	Cyclohexanone	2 - 100 ppm	3	
Cyclohexene	300 ppm	111U	Isopropyl & Ethyl Acetate	20 - 300 ppm	1	Conversion chart
Cyclohexyl Amine	10 ppm	105SD	Ammonia	1 - 20 ppm	1	
O-Chlorotoluene		132SC		1 - 80 ppm		
P-Chlorotoluene		132SC		1 - 50 ppm		
P-Cymene		102SD		20 - 200 ppm		
1,1-Dichloroethane	100 ppm	235SA	1,1-Dichloroethane	10 - 160 ppm	1	Store 40-50° F, twin tubes
1,1-Dichloroethylene	5 ppm	132SC	Vinyl Chloride	1 - 22 ppm	1	Twin tubes, Conversion Chart
1,2-Dichloroethane	10 ppm	230SA	1,2-Dichloroethane	5 - 50 ppm	1	Store 40-50° F, twin tubes
1,2-Dichloroethylene	200 ppm	145SA	1,2-Dichloroethylene	4.2 - 840 ppm	1	Store 40-50° F, twin tubes
1,2-Dichloropropane	10 ppm	157SB	Methyl Bromide	20 - 250 ppm	1	Store 40-50° F, twin tubes
1,3-Dichloropropane	1 ppm	132SC	Vinyl Chloride	1 - 10 ppm	1	Twin tubes, Conversion chart
1,3-Dichloropropane	1 ppm	194S	1,3-Dichloropropane	10 - 500 ppm	1	Store 40-50° F, twin tubes
1,4-Dioxane		119U		20 - 500 ppm		Conversion chart
1,4-Dioxane		139SB		0.05 - 2.5%v		Conversion chart
2,2-Dichloroethyl Ether	5 ppm	223S	2,2-Dichloroethyl Ether	2 - 30 ppm	1	twin tubes
Decahydronaphthalene		111U	Isopropyl & Ethyl Acetate	20 - 200 ppm	1	Conversion chart
Diacetone Alcohol	50 ppm	190U	Ethyl & Methyl Cellosolve	10 - 250 ppm	3	Conversion chart
Diborane	0.1 ppm	242S	Diborane	0.02 - 5.0 ppm	1-5	Store 40-50° F
Dibromomethane		157SB		2 - 40 ppm		
Dichloromethane	50 ppm	180S	Dichloromethane	10 - 1,000 ppm	2-4	Store 40-50° F, twin tubes
Dicyclopentadiene	5 ppm	190U	Methyl Cellosolve	2 - 60 ppm	3	Conversion chart
Diethyl Amine	5ppm (15 ppm)	222S	Diethyl & Trimethyl Amine	1 - 20 ppm	1	
Diethyl Benzene		111U	Isopropyl & Ethyl Acetate	10 - 180 ppm	1	Conversion chart
Diisobutyl Ketone	25 ppm	139U	Methyl Ethyl Ketone	20 - 1,000 ppm	1	Conversion chart
Di-Iso-Propyl Amine	5ppm	105SD	Ammonia	1 - 16 ppm	1	Conversion chart
Dimethyl Amine	5 ppm (15 ppm)	227S	Dimethyl & Ethyl & Methyl Amine	1 - 20 ppm	1	
Dimethyl Ether		123S	Dimethyl Ether	0.01 - 1.20%v	1	
Di-N-Butyl Amine		105SD	Ammonia	2 - 20 ppm	1	Conversion chart
Di-N-Propyl Amine		105SD	Ammonia	1 - 14 ppm	1	Conversion chart
Disilane		240S	Silane	1 - 50 ppm	1	Store 40-50° F, Conversion chart type
Divinyl Benzene		158S		5 - 50 ppm		Conversion chart
N,N-Dimethylacetamide		229S		5 - 70 ppm		
N,N-Dimethylformamide		196S		1 - 30 ppm		
N-Decane		111U		5 - 90 ppm		Conversion chart
N-N-Dimethyl Aniline		105SD		0.5 - 9 ppm		Conversion chart
O-Dichlorobenzene		214S		5 - 100 ppm		
P-Dichlorobenzene		215S		10 - 150 ppm		
Epichlorohydrine	0.5 ppm	192S	Epichlorohydrin	5 - 50 ppm	3	Twin Tubes

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
ETBE (Ethyl-Tert-Butyl Ether)		248U		1 - 60 ppm		
Ethyl Acetate	400 ppm	111SA	Ethyl Acetate	0.1 - 5.0%v	1	
Ethyl Acetate		111U	Isopropyl & Ethyl Acetate	10 - 1,000 ppm	1	
Ethyl Acrylate	5 ppm (15 ppm)	211U	Ethyl & Butyl & Isobutyl Acrylate	5 - 60 ppm	2	Conversion chart
Ethyl Alcohol	1000 ppm	104SA	Ethyl Alcohol	0.05 - 5.0%v	1	
Ethyl Amine	5ppm (15 ppm)	227S	Dimethyl & Ethyl & Methyl Amine	1 - 20 ppm	1	
Ethyl Benzene	100 ppm (125 ppm)	179S	Ethyl Benzene	10 - 500 ppm	1	
Ethyl Bromide	5 ppm	157SB	Methyl Bromide	5 - 400 ppm	1/2	Store 40-50° F, Twin tubes, conversion chart
Ethyl Cellosolve	5ppm	190U	Ethyl & Methyl Cellosolve	5 - 500 ppm	3	
Ethyl Cellosolve Acetate		190U	Ethyl & Methyl Cellosolve	5 - 150 ppm	3	Conversion chart
Ethyl Ether	400 Pppm (500 ppm)	107U	Diethyl Ether (Ether)	20 - 400 ppm	1	
Ethyl Ether (see Diethyl Ether)	400 Pppm (500 ppm)	107SA	Diethyl Ether (Ether)	0.04 - 1.4%v	1	
Ethyl Mercaptan	0.5 ppm	130U	Mercaptans	0.5 - 10 ppm	1/2-1	
Ethyl Mercaptan	0.5 ppm	165SA	Mercaptans	1 - 160 ppm	1-4	
Ethyl Mercaptan	0.5 ppm	165SB	Mercaptans	2.5 - 80 ppm	1/2-1	
Ethyl Methacrylate		111U	Isopropyl & Ethyl Acetate	20 - 500 ppm	1	Conversion chart
Ethylene		108SC		1 - 200 ppm		
Ethylene Chlorohydrine	(C 1 ppm)	119U	Methyl Alcohol	5 - 300 ppm	3	Conversion chart
Ethylene Dibromide	[skin]	166S	Ethylene Dibromide	1 - 50 ppm	1	Store 40-50° F, twin tubes
Ethylene Glycol	(C 100mg/M3)	232SA	Ethylene Glycol	20 - 250mg/ℓ	2	Twin Tubes
Ethylene Glycol	(C 100mg/M3)	232SB	Ethylene Glycol	3 - 40mg/ℓ	3	Twin Tubes
Ethylene – High Range		108SA		20 - 1,200 ppm		
Ethylene Oxide	1 ppm	122SA	Ethylene Oxide	0.01 - 4.0%v	1/2-1	
Ethylene Oxide	1 ppm	122SC	Ethylene Oxide	1 - 15 ppm	3	Twin Tubes
Ethylene Oxide		122Sℓ		0.1 - 14.0 ppm		
Ethylene Oxide		122SL		50 - 2,600 ppm		
Ethylene Oxide	1 ppm	122SM	Ethylene Oxide	5 - 100 ppm	3	
Ethylene – Colour Intensity		108B		0.1 - 100 ppm		
Formaldehyde	(C 0.3 ppm)	171SA	Formaldehyde	20 - 1,500 ppm	2	Conversion chart
Formaldehyde	(C 0.3 ppm)	171SB	Formaldehyde	1 - 35 ppm	3	Twin tubes
Formaldehyde	(C 0.3 ppm)	171SC	Formaldehyde	0.05 - 4.0 ppm	5-10	Store 40-50° F, twin tubes
Formic Acid	5 ppm (10 ppm)	216S	Acetic Acid	1 - 50 ppm	1	
Free Residual Chlorine		234SA		0.4 - 5.0 ppm		
Furan		122SA	Ethylene Oxide	0.01 - 2.0%v	1/2-1	Conversion chart
Furfural	2ppm	190U	Ethyl & Methyl Cellosolve	2 - 60 ppm	3	Conversion chart
Furfuryl Alcohol	10 ppm (15 ppm)	238S	Furfuryl Alcohol	5 - 25 ppm	5	
Gasoline	300 ppm (500 ppm)	110S	Gasoline	0.05 - 0.6%v	1	
General Hydrocarbons		187S	General Hydrocarbons	50 - 1,400 ppm	1	
Heptane	400 ppm (500 ppm)	113SB	Hexane	100 - 2,000 ppm	1	Conversion chart
Hydrazine	0.01 ppm	219S	Hydrazine	0.05 - 10 ppm	1-4	
Hydrogen	asphyx	137U	Asphyx	0.05 - 0.8%v	1/2	
Hydrogen Chloride	(C 2ppm)	173SA	Hydrogen Chloride	20 - 1,200 ppm	1/2-1	
Hydrogen Chloride	(C 2ppm)	173SB	Hydrogen Chloride	0.4 - 40 ppm	1/2-5	

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
Hydrogen Cyanide	(C 4.7 ppm)	112SA	Hydrogen Cyanide	0.01 - 3.00%v	1	
Hydrogen Cyanide	(C 4.7 ppm)	112SB	Hydrogen Cyanide	0.5 - 100 ppm	1-4	Store 40-50° F
Hydrogen Cyanide	(C 4.7 ppm)	112SC	Hydrogen Cyanide	0.3 - 8 ppm	3	Store 40-50° F, twin tubes
Hydrogen Fluoride	(C 2 ppm) 0.5 ppm	156S	Hydrogen Fluoride	0.17 - 30 ppm	3-6	
Hydrogen Peroxide	1 ppm	247S	Hydrogen Peroxide	0.5 - 10.0 ppm	5	
Hydrogen Selenide	0.05 ppm	167S	Hydrogen Selenide	1 - 600 ppm	1-5	
Hydrogen Sulphide	10 ppm (15 ppm)	120GR	Hydrogen Sulfide	0.025 - 0.4gr/100cf	1/2-1	
Hydrogen Sulphide	10 ppm (15 ppm)	120GT	Hydrogen Sulfide	0.25 - 4gr/100cf	1/2-1	
Hydrogen Sulphide	10 ppm (15 ppm)	120SB	Hydrogen Sulfide	0.75 - 300 ppm	1/2-4	
Hydrogen Sulphide	10 ppm (15 ppm)	120SD	Hydrogen Sulfide	1 - 60 ppm	1/2-1	
Hydrogen Sulphide	10 ppm (15 ppm)	120SE	Hydrogen Sulfide	0.5 - 40 ppm	1/2-2	
Hydrogen Sulphide	10 ppm (15 ppm)	120SF	Hydrogen Sulfide	25 - 2,000 ppm	1/2-2	
Hydrogen Sulphide	10 ppm (15 ppm)	120SH	Hydrogen Sulfide	0.1 - 4.0%v	1	
Hydrogen Sulphide	10 ppm (15 ppm)	120SM	Hydrogen Sulfide	0.05 - 1.20%v	1/2-1	
Hydrogen Sulphide	10 ppm (15 ppm)	120U	Hydrogen Sulfide	0.2 - 6.0 ppm	1/2-1	
Hydrogen Sulphide – In Presence of Sulphur Dioxide	10 ppm (15 ppm)	120SC	Hydrogen Sulfide In Presence Of SO2	0.005 - 0.16%v	1	
Hydrogen Sulphide/Mercaptans		282S	Hydrogen Sulfide & Mer- captans	H2S;1 - 30 ppm	1	Twin tubes
Hydrogen Sulphide+Mercaptans – Separation Measurement		282S		R <sub>2</sub> SH;0.5 - 5.0 ppm		
Hydrogen Sulphide – Ultra High Range		120UH		2 - 20%v		
Hydrogen Sulphide – Ultra High Range		120UT		2.5 - 40%v		
N-Hexane		113SA		0.05 - 1.32%v		
N-Hexane		113SB		50 - 1,400 ppm		
N-Hexane		113SC		5 - 800 ppm		
Inorganic Gas-Qualitative		131	Inorganic Qualitative	Qual (12 gases)	1	
Isobutane		113SB	Hexane	50 - 1,200 ppm	1	Conversion chart
Isobutyl Acetate	150 ppm	139SB	Methyl Ethyl Ketone	0.01 - 1.4%v	2	Conversion chart
Isobutyl Acetate	150 ppm	153U	Isobutyl Acetate	10 - 400 ppm	2	Conversion chart
Isobutyl Acrylate		211U	Ethyl & Butyl & Isobutyl Acrylate	5 - 60 ppm	2	Conversion chart
Isobutyl Alcohol	50 ppm	208U	Isobutyl Alcohol	5 - 100 ppm	3	
Isobutylene		113SB	Hexane	0.03 - 2.0%v	1	Conversion chart
Isobutyric Acid		216S	Acetic Acid	3 - 50 ppm	1	Conversion chart
Isopentyl Acetate		188U		10 - 400 ppm		
Isopentyl Alcohol	100 ppm (125 ppm)	209U	Isopentyl Alcohol	5 - 100 ppm	3	
Isophorone	(C 5 ppm)	197U	Cyclohexanone	5 - 80 ppm	3	Conversion chart
Isoprene		190U	Ethyl & Methyl Cellosolve	1 - 16 ppm	3	Conversion chart
Isopropyl Acetate	100 ppm (200 ppm)	111U	Isopropyl & Ethyl Acetate	10 - 1,000 ppm	2	
Isopropyl Acetate	100 ppm (200 ppm)	139SB	Methyl Ethyl Ketone	0.01 - 1.2%v	1	Conversion chart
Isopropyl Alcohol	200 ppm (400 ppm)	122SA	Ethylene Oxide	0.05 - 2.5%v	1	Conversion chart
Isopropyl Alcohol	200 ppm (400 ppm)	150U	Isopropyl Alcohol	20 - 1,200 ppm	1-2	
Isopropyl Amine	5ppm (10 ppm)	222S	Diethyl & Trimethyl Amine	1 - 12 ppm	1	Conversion chart
Isopropyl Cellosolve	25 ppm	190U	Ethyl & Methyl Cellosolve	5 - 350 ppm	3	Conversion chart
Isopropyl Ether	250 ppm (310 ppm)	111U	Isopropyl & Ethyl Acetate	30 - 800 ppm	1	Conversion chart
Isopropyl Mercaptan		130U	Mercaptans	0.5 - 10 ppm	1/2-1	



Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
Isovaleric Acid		216S	Acetic Acid	3 - 50 ppm	1	Conversion chart
1-Methoxy-2-Propanol (See Propylene Glycol Monomethyl Ether)		197U		10 - 500 ppm		Conversion Chart
Maleic Anhydride	0.1 ppm	216S	Acetic Acid	0.2 - 10.0 ppm	4	Conversion chart
M-Chlorotoluene		132SC		0.5 - 10 ppm		
Mercury Vapour	0.025 mg/M3	142S	Mercury Vapor	0.1 - 10.0mg/Ⓜ <sup>3</sup>	1-5	
Mesityl Oxide	15 ppm (25 ppm)	190U	Ethyl & Methyl Cellosolve	5 - 100 ppm	2	Conversion chart
Methacrylic Acid	20 ppm	216S	Acetic Acid	1 - 50 ppm	1	Conversion chart
Methyl Acetate	200 ppm (250 ppm)	111SA	Ethyl Acetate	0.1 - 3.0%v	1	Conversion chart
Methyl Acrylate	2ppm	211U	Ethyl & Butyl & Isobutyl Acrylate	2 - 60 ppm	2	
Methyl Alcohol	200 ppm (250 ppm)	119SA	Methyl Alcohol	0.05 - 6.0%v	1	
Methyl Alcohol	200 ppm (250 ppm)	119U	Methyl Alcohol	20 - 1,000 ppm	1	
Methyl Amine	5 ppm (15 ppm)	227S	Dimethyl & Ethyl & Methyl Amine	1 - 20 ppm	1	
Methyl Bromide	1 ppm	157SA	Methyl Bromide	10 - 500 ppm	1	Store 40-50° F, twin tubes
Methyl Bromide		157SB	Methyl Bromide	0.4 - 80 ppm	1-4	Store 40-50° F, twin tubes
Methyl Bromide		157SD		0.1 - 20 ppm		
Methyl Butyl Ketone	5 ppm (10 ppm)	237S	Vinyl Acetate	5 - 80 ppm	1	Conversion chart
Methyl Cellosolve	0.1 ppm	190U	Ethyl & Methyl Cellosolve	5 - 500 ppm	3	
Methyl Cellosolve Acetate		190U		3 - 120 ppm		Conversion chart
Methyl Chloroform	350 ppm (450 ppm)	160S		15 - 400 ppm	1-2	Store 40-50° F, twin tubes
Methyl Cyclohexane	400 ppm	113SB	N-Hexane	100 - 1,600 ppm	1	Conversion chart
Methyl Cyclohexanol	50 ppm	199U	Methyl Cyclohexanol	5 - 200 ppm	3	
Methyl Cyclohexanone	50 ppm (75 ppm) [ortho]	198U	Methyl Cyclohexanone	2 - 100 ppm	3	
Methyl Ethyl Ketone	200 ppm (300 ppm)	122SA	Ethylene Oxide	0.05 - 5.0%v	1/2-1	Conversion chart
Methyl Ethyl Ketone	200 ppm (300 ppm)	139SB	Methyl Ethyl Ketone	0.01 - 1.4%v	2	
Methyl Ethyl Ketone	200 ppm (300 ppm)	139U	Methyl Ethyl Ketone	20 - 1,500 ppm	1	
Methyl Iodide	2 ppm	176S	Methyl Iodide	2 - 40 ppm	2	Store 40-50° F, twin tubes
Methyl Iodide	2 ppm	176SC	Methyl Iodide	0.4 - ppm	2	
Methyl Iodide	2 ppm	176UH	Methyl Iodide	500 - 15,000 ppm		
Methyl Isobutyl Ketone	50 ppm (75 ppm)	122SA	Methyl Isobutyl Ketone	0.01 - 0.6%v	1	Conversion chart
Methyl Isobutyl Ketone		155U		5 - 300 ppm		
Methyl Mercaptan	0.5 ppm	130U	Mercaptans	0.5 - 10 ppm	1/2-1	
Methyl Mercaptan	0.5 ppm	164SA	Methyl Mercaptan	5 - 140 ppm	1	
Methyl Mercaptan	0.5 ppm	164SH	Methyl Mercaptan	50 - 1,000 ppm	1	
Methyl Methacrylate	50 ppm 100 ppm	184S	Methyl Methacrylate & Allyl Alcho	10 - 160 ppm	1	
Methyl Propyl Ketone	200 ppm	139U	Methyl Ethyl Ketone	20 - 1,500 ppm	1	
Methyl Styrene	50 ppm 100 ppm	193S	Methyl Styrene	10 - 500 ppm	1	
Mineral Turpentine	100 ppm	111U	Isopropyl & Ethyl Acetate	4 - 200 ppm	1	Conversion chart
Mitc(Methyl Isothiocyanate)		111U		10 - 200 ppm		
Mitc(Methyl Isothiocyanate)		245UH		200 - 10,000 ppm		
Mitc(Methyl Isothiocyanate)		245UM		10 - 1,500 ppm		
Monoethanol Amine	3 ppm (6 ppm)	224SA	Monoethanol Amine	0.5 - 50 ppm	1-2	

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
Morpholine	20 ppm	105SD	Ammonia	2 - 22 ppm	1	Conversion chart
N-Methyl Aniline		105SD		0.5 - 6 ppm		Conversion chart
Naphthalene	10 ppm (15 ppm)	153U	Isobutyl Acetate	10 - 100 ppm	1	Conversion chart
Nickel Carbonyl – Concentration Chart Method	0.05 ppm	129	Nickel Carbonyl	20 - 700 ppm	1	
Nitric Acid Vapour	2 ppm (4 ppm)	233S	Nitric Acid Vapor	1 - 20 ppm	1-2	
Nitrogen Dioxide	3ppm (5 ppm)	117SA	Nitrogen Dioxide	20 - 1,000 ppm	1	
Nitrogen Dioxide	3ppm (5 ppm)	117SB	Nitrogen Dioxide	0.5 - 30.0 ppm	2	
Nitrogen Dioxide	3ppm (5 ppm)	117SD	Nitrogen Dioxide	0.1 - 1.0 ppm	3	5 tests per box
Nitrogen Oxides	NO: 25 ppm, NO2: 3 ppm (5 ppm)	175SA	Nitrogen Dioxide	20 - 250 ppm	1	
Nitrogen Oxides	NO: 25 ppm, NO2: 3 ppm (5 ppm)	175SH	Nitrogen Dioxide	100 - 2,500 ppm	1	
Nitrogen Oxides	NO: 25 ppm, NO2: 3 ppm (5 ppm)	175U		0.5 - 30 ppm	1/2-1	
Nitro-Oxide Compound		174A		NO;10 - 300 ppm		
Nitro-Oxide Compound – Concentration Chart Method		174A		NO2;1 - 40 ppm		
Nitro-Oxide Compound-Concentration Chart Method		174A		NO2;1 - 40 ppm		
Nitro-Oxide Compound-In Flue Gas		174B		NO;10 - 300 ppm		
N-Nonane	200 ppm	111U	Isopropyl & Ethyl Acetate	5 - 160 ppm	1/2-1	Conversion chart
Organic Gas – Qualitative		186B	Organic Compounds		1	
Organic Gas Checker		186	Organic Compounds		1	
Oxygen+Carbon Dioxide		281S	Oxygen & Carbon Dioxide	O2;2 - 10%v	1	
Oxygen Carbon Dioxide – Separation Measurement		281S	Oxygen & Carbon Dioxide	CO2;1 - 20%v	1/2-1	
Oxygen – Non-Heating Type		159SC	Oxygen	1.5 - 24%v	1/2-1	Twin tubes
Ozone	0.05 ppm (Heavy Work Load)	182SA	Ozone	50 - 1,000 ppm	1/2-1	
Ozone	0.05 ppm (Heavy Work Load)	182SB	Ozone	2.5 - 100 ppm	1/2-2	
Ozone	0.05 ppm (Heavy Work Load)	182U	Ozone	0.025 - 3.0 ppm	1-6	
1-Propanol	200 ppm (400 ppm)	190U	Ethyl & Methyl Cellosolve	20 - 300 ppm	1	Conversion Chart
N-Propyl Mercaptan		130U		0.5 - 10 ppm		
Pentane	600 ppm	113SB	N-Hexane	50 - 1,000 ppm	1	Conversion chart
Pentyl Acetate	50 ppm (100 ppm)	210U	Pentyl Acetate	10 - 200 ppm	3	
Pentyl Amine		105SD	Ammonia	2 - 22 ppm	1	Conversion chart
Phenol	5 ppm	183U	Phenol & Cresol	0.5 - 25.0 ppm	2	
Phosgene	0.1 ppm	146S	Phosgene	0.1 - 20 ppm	1-5	
Phosphine	0.3 ppm (1 ppm)	121SC	Phosphine	20 - 1,400 ppm	1/2-2	
Phosphine	0.3 ppm (1 ppm)	121SD	Phosphine	0.25 - 20.0 ppm		
Phosphine		121SG		5 - 150 ppm		
Phosphine		121SS		200 - 6,000 ppm		
Phosphine	0.3 ppm (1 ppm)	121U	Phosphine & Arsine	0.05 - 2.0 ppm	1-2	
Phosphine – High Range		121SH		100 - 3,200 ppm		
Propane	1000 ppm	125SA	Propane	0.02 - 0.50%v	1	

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
Propionic Acid	10 ppm	216S	Acetic Acid	3 - 50 ppm	1	Conversion chart
Propyl Acetate	200 ppm (250 ppm)	139SB	Methyl Ethyl Ketone	0.01 - 1.4%v	2	Conversion chart
Propyl Acetate		151U		20 - 1,000 ppm		
Propyl Amine		105SD	Ammonia	1 - 20 ppm	1	Conversion chart
Propylene	500 ppm	185S	Propylene	50 - 1,000 ppm	1	
Propylene Glycol		122SC		5 - 50 ppm		Conversion chart
Propylene Oxide	2 ppm	122SC	Ethylene Oxide	3 - 70 ppm	1-3	Conversion chart
Propylene Oxide	2 ppm	163SA	Propylene Oxide	0.05 - 5.0%v	1/2-1	
Pyridine	1 ppm	105SD	Ammonia	0.5 - 10 ppm	1/2-1	Conversion chart
Salinity		205SL		0.01 - 0.80%v		
Silane	5 ppm	240S	Silane	0.5 - 50 ppm	1-2	
Styrene	20 ppm (40 ppm)	158S	Styrene	2.5 - 300 ppm	1-2	
Styrene	20 ppm (40 ppm)	158SB	Styrene	1 - 100 ppm	2-4	Twin tubes
Sulphur Dioxide	2ppm (5 ppm)	103SA	Sulfur Dioxide	0.1 - 3.0%v	1	
Sulphur Dioxide	2ppm (5 ppm)	103SB	Sulfur Dioxide	0.02 - 0.30%v	1	
Sulphur Dioxide	2ppm (5 ppm)	103SC	Sulfur Dioxide	20 - 300 ppm	1	
Sulphur Dioxide	2ppm (5 ppm)	103SD	Sulfur Dioxide	1 - 60 ppm	1	
Sulphur Dioxide	2ppm (5 ppm)	103SE	Sulfur Dioxide	0.25 - 10 ppm	1-2	Store 40-50° F
Sulphur Dioxide – In Carbon Dioxide	2ppm (5 ppm)	103SG	Sulfur Dioxide (In CO2)	0.1 - 25 ppm	1-4	
Sulphur Dioxide – In Flue Gas		103SF	Sulfur Dioxide (In Flue Gas)	0.02 - 0.30%v		
Sulphuric Acid	0.2mg/M3	244U	Sulfuric Acid	0.5 - 5.0mg/m <sup>3</sup>	5	
1,1,2,2-Tetrachloroethane	1 ppm	236SA	1,1,2-Trichloromethane	20 - 60 ppm	3	Conversion chart
1,1,2-Trichloroethane	10 ppm	236SA	1,1,2-Tetrachloroethane	10 - 100 ppm	1	Store 40-50° F, twin tubes
1,2,4-Trimethyl Benzene	25 ppm	111U	Isopropyl & Ethyl Acetate	20 - 250 ppm	1	Conversion chart
2,2,4-Trimethyl Pentane		113SB	Hexane	100 - 4,000 ppm	1/2-2	Conversion Chart
O-Toluidine		105SD		2 - 22 ppm		Conversion chart
P-Toluidine		105SD		2 - 20 ppm		Conversion chart
Tert-Butanol		111U		20 - 500 ppm		Conversion chart
Tert-Butyl Mercaptan		130U		0.5 - 10 ppm		
Tert-Butyl Methyl Ether (MTBE)		111U		25 - 500 ppm		Conversion chart
Tetrachloroethylene	25 ppm (100 ppm)	135SA	Tetrachloroethylene (Perchloroethylene)	5 - 300 ppm	1/2-1	Store 40-50° F
Tetrachloroethylene	25 ppm (100 ppm)	135SB	Tetrachloroethylene	0.2 - 10 ppm	1-4	Store 40-50° F
Tetrachloroethylene	25 ppm (100 ppm)	135SG	Tetrachloroethylene	0.1 - 2.0%v	1-2	5 tests per box
Tetrachloroethylene		135SM		50 - 1,250 ppm		
Tetraethoxysilane		243U	Tetraethoxysilane	5 - 200 ppm	1-2	
Tetrahydrofuran	50ppm (100 ppm)	102SA	Acetone	0.2 - 5.0%v	1/2-1	Conversion chart
Tetrahydrofuran		162U		20 - 400 ppm		
Tetrahydrothiophene		190U	Ethyl & Methyl Cellosolve	4 - 100 ppm	3	Conversion chart
Toluene	50 ppm	124SA	Toluene	10 - 500 ppm	1	
Toluene		124SB	Toluene	2 - 100 ppm	1	
Toluene		124SH	Toluene	100 - 3,000 ppm	1	
Trichloroethylene	50 ppm (100 ppm)	134SA	Trichloroethylene	5 - 300 ppm	1/2-1	
Trichloroethylene	50 ppm (100 ppm)	134SB	Trichloroethylene	0.2 - 36.8 ppm	1/4-4	
Trichloroethylene	50 ppm (100 ppm)	134SG	Trichloroethylene	0.05 - 2.0%v	1	

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
Trichlorotoluene		132SC	Vinyl Chloride	0.2 - 4 ppm	1	
Triethyl Amine	1ppm (3 ppm)	213S	Triethylamine	1 - 20 ppm	1/2-1	
Trimethyl Amine	5ppm (15 ppm)	105SE		0.5 - 100 ppm		
Trimethyl Amine	5ppm (15 ppm)	222S	Diethyl & Trimethyl Amine	1 - 20 ppm	1	
N-Undecane		111U		10 - 140 ppm		Conversion chart
N-Valeric Acid		216S		3 - 70 ppm		Conversion chart
Vinyl Acetate		237S	Vinyl Acetate	5 - 120 ppm	1-2	
Vinyl Chloride	1 ppm	132SA	Vinyl Chloride	0.05 - 1.0%v	1	
Vinyl Chloride	1 ppm	132SB	Vinyl Chloride	5 - 500 ppm	1	Store 40-50° F, twin tubes
Vinyl Chloride	1 ppm	132SC	Vinyl Chloride	0.1 - 12 ppm	1-4	Twin tubes
Water Vapour		177SA	Water Vapor	1.7 - 33.8mg/L	1	
Water Vapour		177U	Water Vapor	0.05 - 2.0mg/L	1	
Water Vapour		177UL	Water Vapor	3 - 80LB/MMCF	1	
Water Vapour – Ultra Low Range		177UR	Water Vapor	2 - 12LB/MMCF	2	
Water Vapour		177UR2	Water Vapor	2 - 12LB/MMCF	1	
Xylene	100 ppm (150 ppm)	143SA	Xylene	5 - 1,000 ppm	2	
Xylene	100 ppm (150 ppm)	143SB	Xylene	5 - 200 ppm	2	
Water Vapour		177UL	Water Vapor	3 - 80LB/MMCF	1	
Water Vapour – Ultra Low Range		177UR	Water Vapor	2 - 12LB/MMCF	2	
Water Vapour		177UR2	Water Vapor	2 - 12LB/MMCF	1	
Xylene	100 ppm (150 ppm)	143SA	Xylene	5 - 1,000 ppm	2	
Xylene	100 ppm (150 ppm)	143SB	Xylene	5 - 200 ppm	2	

## Compressed Breathing Tubes

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
Compressed Breathing Air(CO)		600SP		5 - 100 ppm		
Compressed Breathing Air(CO <sub>2</sub> )		601SP		100 - 3,000 ppm		
Compressed Breathing Air(H <sub>2</sub> O)		603SPA		20 - 160mg/l <sup>3</sup>		
Compressed Breathing Air(O <sub>2</sub> )		604SP		2 - 24%v		
Compressed Breathing Air(Oil Mist)		602SP		0.3 - 5mg/l <sup>3</sup>		

## Ion Detector Tubes

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
Sulphide Ion		200SA		2 - 1,000 ppm		
Sulphide Ion		200SB		0.5 - 10 ppm		
Copper Ion		203S		1 - 100mg/L		
Cyanide Ion		204S		0.2 - 5.0 ppm		
Chloride Ion		201SA		10 - 2,000 ppm		
Chloride Ion		201SB		3 - 200 ppm		

## TWA Tubes

Gas or vapor to be measured	TLV TWA (STEL/ Ceiling)	Tube No.	Detector Tube to be Used	Measuring range	No of Strokes	Notes
TWA – Ammonia		501TWA		5 - 200 ppm		
TWA – Carbon Monoxide		500TWA		5 - 400 ppm		
TWA – Hydrogen Sulphide		502TWA		1 - 20 ppm		
TWA – Sulphur Dioxide		503TWA		0.5 - 20 ppm		
TWA – Toluene		504TWA		20 - 200 ppm		

# Numerical Tube Listing

Tube No.	Gas (Range)
133SB	Acetaldehyde (5 - 140 ppm)
133A	Acetaldehyde – Concentration Chart Method (0.004 - 1.0%)
216S	Acetic Acid (1 - 50 ppm)
102SA	Acetone (0.1 - 5.0%v)
102SC	Acetone (0.01 - 4.0%v)
102SD	Acetone (20 - 5,000 ppm)
101S	Acetylene (50 - 1,000 ppm)
280S	"Acetylene+Ethylene (A: 20-300 ppm, E: 200-2000 ppm) "
136	Acrolein – Concentration Chart Method (0.005 - 1.8%v)
128SA	Acrylonitrile (0.1 - 3.5%v)
128SB	Acrylonitrile (10 - 500 ppm)
128SC	Acrylonitrile (1 - 120 ppm)
128SD	Acrylonitrile (0.25 - 20 ppm)
184S	Allyl Alcohol (20 - 500 ppm)
132SC	Allyl Chloride (1 - 40 ppm)
105SA	Ammonia (0.5 - 10%v)
105SB	Ammonia (50 - 900 ppm)
105SC	Ammonia (5 - 260 ppm)
105SD	Ammonia (0.2 - 20 ppm)
105SE	Ammonia (1 - 200 ppm)
105SH	Ammonia (0.5 - 30%v)
105SM	Ammonia (0.1 - 1.0%v)
181S	Aniline (1 - 30 ppm)
158S	a-Pinene (20 - 300 ppm)
121U	Arsine (0.05 - 2.0 ppm)
140SA	Arsine (5 - 160 ppm)
168SA	1,3-Butadiene (0.03 - 2.60%v)
168SB	1,3-Butadiene (30 - 600 ppm)
168SC	1,3-Butadiene (2.5 - 100 ppm)
168SE	1,3-Butadiene (0.1 - 10.0 ppm)
157SA	1-Bromopropane (10 - 500 ppm)
157SB	1-Bromopropane (5 - 80 ppm)
190U	1-Butanol (5 - 100 ppm)
189U	2-Butanol (4 - 300 ppm)
118SC	Benzene (1 - 100 ppm)
118SD	Benzene (0.1 - 75 ppm)
118SB	Benzene – In Presence Of Gasoline And/Or Other Aromatic Hydrocarbons (5 - 300 ppm)
118SE	Benzene – In Presence Of Gasoline And/Or Other Aromatic Hydrocarbons (0.2 - 80 ppm)
114	Bromine – Concentration Chart Method (1 - 20 ppm)
138U	Butyl Acetate (10 - 400 ppm)
139SB	Butyl Acetate (0.01 - 1.0%v)
211U	Butyl Acrylate (2 - 60 ppm)
111U	Butyl Ether (10 - 1,200 ppm)
221SA	N-Butane (0.05 - 0.60%v)
126SA	Carbon Dioxide (0.1 - 5.2%v)
126SB	Carbon Dioxide (0.05 - 1.0%v)

Tube No.	Gas (Range)
126SF	Carbon Dioxide (100 - 4,000 ppm)
126SG	Carbon Dioxide (0.02 - 1.40%v)
126B	Carbon Dioxide – Concentration Chart Method (0.01 - 0.70%v)
126SH	Carbon Dioxide – Extra High Range (1 - 20%v)
126UH	Carbon Dioxide – Ultra High Range (5 - 50%v)
141SA	Carbon Disulphide (30 - 500 ppm)
141SB	Carbon Disulphide (0.8 - 50 ppm)
106S	Carbon Monoxide (10 - 250 ppm)
106SA	Carbon Monoxide (5 - 2,000 ppm)
106SC	Carbon Monoxide (1 - 50 ppm)
106SH	Carbon Monoxide (0.1 - 2.0%v)
106SS	Carbon Monoxide (30 - 500 ppm)
106C	Carbon Monoxide – In Presence Of Ethylene & Nitrogen Oxides, Colour Intensity (10 - 1,000 ppm)
106UH	Carbon Monoxide – Ultra High Range (0.1 - 20%v)
147S	Carbon Tetrachloride (5 - 60 ppm)
239S	Carbonyl Sulphide (5 - 60 ppm)
109SA	Chlorine (1 - 40 ppm)
109SB	Chlorine (0.1 - 10.0 ppm)
109U	Chlorine (0.05 - 2 ppm)
116	Chlorine Dioxide – Concentration Chart Method (1 - 20 ppm)
178SB	Chlorobenzene (1 - 140 ppm)
152S	Chloroform (23 - 500 ppm)
169S	Chloropicrin (0.5 - 20 ppm)
172S	Chloropicrin (0.05 - 16 ppm)
600SP	Compressed Breathing Air(CO) (5 - 100 ppm)
601SP	Compressed Breathing Air(CO <sub>2</sub> ) (100 - 3,000 ppm)
603SPA	Compressed Breathing Air(H <sub>2</sub> O) (20 - 160mg/ℓ)
604SP	Compressed Breathing Air(O <sub>2</sub> ) (2 - 24%v)
602SP	Compressed Breathing Air(Oil Mist) (0.3 - 5mg/ℓ)
183U	Cresol (0.5 - 25.0 ppm)
115S	Cyclohexane (0.01 - 0.60%v)
206U	Cyclohexanol (5 - 500 ppm)
197U	Cyclohexanone (2 - 100 ppm)
235SA	1,1-Dichloroethane (10 - 160 ppm)
230SA	1,2-Dichloroethane (5 - 50 ppm)
145SA	1,2-Dichloroethylene (4.2 - 840 ppm)
194S	1,3-Dichloropropane (10 - 500 ppm)
119U	1,4-Dioxane (20 - 500 ppm)
223S	2,2-Dichloroethyl Ether (2 - 30 ppm)
242S	Diborane (0.02 - 5.0 ppm)
180S	Dichloromethane (10 - 1,000 ppm)
222S	Diethyl Amine (1 - 20 ppm)
139U	Diisobutyl Ketone (20 - 1,000 ppm)
227S	Dimethyl Amine (1 - 20 ppm)
123S	Dimethyl Ether (0.01 - 1.20%v)
240S	Disilane (1 - 50 ppm)
229S	N,N-Dimethylacetamide (5 - 70 ppm)

Tube No.	Gas (Range)
196S	N,N-Dimethylformamide (1 - 30 ppm)
214S	O-Dichlorobenzene (5 - 100 ppm)
215S	P-Dichlorobenzene (10 - 150 ppm)
192S	Epichlorohydrine (5 - 50 ppm)
248U	ETBE (Ethyl-Tert-Butyl Ether) (1 - 60 ppm)
111SA	Ethyl Acetate (0.1 - 5.0%v)
104SA	Ethyl Alcohol (0.05 - 5.0%v)
179S	Ethyl Benzene (10 - 500 ppm)
107U	Ethyl Ether (20 - 400 ppm)
107SA	Ethyl Ether (see Diethyl Ether) (0.04 - 1.4%v)
130U	Ethyl Mercaptan (0.5 - 10 ppm)
165SA	Ethyl Mercaptan (1 - 160 ppm)
165SB	Ethyl Mercaptan (2.5 - 80 ppm)
108SC	Ethylene (1 - 200 ppm)
166S	Ethylene Dibromide (1 - 50 ppm)
232SA	Ethylene Glycol (20 - 250mg/l <sup>2</sup> )
232SB	Ethylene Glycol (3 - 40mg/l <sup>2</sup> )
108SA	Ethylene – High Range (20 - 1,200 ppm)
122SA	Ethylene Oxide (0.01 - 4.0%v)
122SC	Ethylene Oxide (1 - 15 ppm)
122S <sup>2</sup>	Ethylene Oxide (0.1 - 14.0 ppm)
122SL	Ethylene Oxide (50 - 2,600 ppm)
122SM	Ethylene Oxide (5 - 100 ppm)
108B	Ethylene – Colour Intensity (0.1 - 100 ppm)
171SA	Formaldehyde (20 - 1,500 ppm)
171SB	Formaldehyde (1 - 35 ppm)
171SC	Formaldehyde (0.05 - 4.0 ppm)
234SA	Free Residual Chlorine (0.4 - 5.0 ppm)
238S	Furfuryl Alcohol (5 - 25 ppm)
110S	Gasoline (0.05 - 0.6%v)
187S	General Hydrocarbons (50 - 1,400 ppm)
113SB	Heptane (100 - 2,000 ppm)
219S	Hydrazine (0.05 - 10 ppm)
137U	Hydrogen (0.05 - 0.8%v)
173SA	Hydrogen Chloride (20 - 1,200 ppm)
173SB	Hydrogen Chloride (0.4 - 40 ppm)
112SA	Hydrogen Cyanide (0.01 - 3.00%v)
112SB	Hydrogen Cyanide (0.5 - 100 ppm)
112SC	Hydrogen Cyanide (0.3 - 8 ppm)
156S	Hydrogen Fluoride (0.17 - 30 ppm)
247S	Hydrogen Peroxide (0.5 - 10.0 ppm)
167S	Hydrogen Selenide (1 - 600 ppm)
120GR	Hydrogen Sulphide (0.025 - 0.4gr/100cf)
120GT	Hydrogen Sulphide (0.25 - 4gr/100cf)
120SB	Hydrogen Sulphide (0.75 - 300 ppm)
120SD	Hydrogen Sulphide (1 - 60 ppm)
120SE	Hydrogen Sulphide (0.5 - 40 ppm)
120SF	Hydrogen Sulphide (25 - 2,000 ppm)
120SH	Hydrogen Sulphide (0.1 - 4.0%v)
120SM	Hydrogen Sulphide (0.05 - 1.20%v)
120U	Hydrogen Sulphide (0.2 - 6.0 ppm)

Tube No.	Gas (Range)
120SC	Hydrogen Sulphide – In Presence of Sulphur Dioxide (0.005 - 0.16%v)
282S	Hydrogen Sulphide <sup>2</sup> Mercaptans (H <sub>2</sub> S;1 - 30 ppm)
120UH	Hydrogen Sulphide – Ultra High Range (2 - 20%v)
120UT	Hydrogen Sulphide – Ultra High Range (2.5 - 40%v)
113SA	N-Hexane (0.05 - 1.32%v)
113SC	N-Hexane (5 - 800 ppm)
131	Inorganic Gas-Qualitative ( Qual (12 gases) )
153U	Isobutyl Acetate (10 - 400 ppm)
208U	Isobutyl Alcohol (5 - 100 ppm)
188U	Isopentyl Acetate (10 - 400 ppm)
209U	Isopentyl Alcohol (5 - 100 ppm)
150U	Isopropyl Alcohol (20 - 1,200 ppm)
142S	Mercury Vapour (0.1 - 10.0mg/l <sup>2</sup> )
119SA	Methyl Alcohol (0.05 - 6.0%v)
157SD	Methyl Bromide (0.1 - 20 ppm)
237S	Methyl Butyl Ketone (5 - 80 ppm)
160S	Methyl Chloroform (15 - 400 ppm)
199U	Methyl Cyclohexanol (5 - 200 ppm)
198U	Methyl Cyclohexanone (2 - 100 ppm)
176S	Methyl Iodide (2 - 40 ppm)
176SC	Methyl Iodide (0.4 - ppm)
176UH	Methyl Iodide (500 - 15,000 ppm)
155U	Methyl Isobutyl Ketone (5 - 300 ppm)
164SA	Methyl Mercaptan (5 - 140 ppm)
164SH	Methyl Mercaptan (50 - 1,000 ppm)
193S	Methyl Styrene (10 - 500 ppm)
245UH	Mitc(Methyl Isothiocyanate) (200 - 10,000 ppm)
245UM	Mitc(Methyl Isothiocyanate) (10 - 1,500 ppm)
224SA	Monoethanol Amine (0.5 - 50 ppm)
129	Nickel Carbonyl – Concentration Chart Method (20 - 700 ppm)
233S	Nitric Acid Vapour (1 - 20 ppm)
117SA	Nitrogen Dioxide (20 - 1,000 ppm)
117SB	Nitrogen Dioxide (0.5 - 30.0 ppm)
117SD	Nitrogen Dioxide (0.1 - 1.0 ppm)
175SA	Nitrogen Oxides (20 - 250 ppm)
175SH	Nitrogen Oxides (100 - 2,500 ppm)
175U	Nitrogen Oxides (0.5 - 30 ppm)
174A	Nitro-Oxide Compound (NO;10 - 300 ppm)
174B	Nitro-Oxide Compound-In Flue Gas (NO;10 - 300 ppm)
186B	Organic Gas – Qualitative
186	Organic Gas Checker
281S	Oxygen+Carbon Dioxide (O <sub>2</sub> ;2 - 10%v)
159SC	Oxygen – Non-Heating Type (1.5 - 24%v)
182SA	Ozone (50 - 1,000 ppm)
182SB	Ozone (2.5 - 100 ppm)
182U	Ozone (0.025 - 3.0 ppm)
210U	Pentyl Acetate (10 - 200 ppm)
146S	Phosgene (0.1 - 20 ppm)
121SC	Phosphine (20 - 1,400 ppm)
121SD	Phosphine (0.25 - 20.0 ppm)
121SG	Phosphine (5 - 150 ppm)

Tube No.	Gas (Range)
121SS	Phosphine (200 - 6,000 ppm)
121SH	Phosphine – High Range (100 - 3,200 ppm)
125SA	Propane (0.02 - 0.50%v)
151U	Propyl Acetate (20 - 1,000 ppm)
185S	Propylene (50 - 1,000 ppm)
163SA	Propylene Oxide (0.05 - 5.0%v)
205SL	Salinity (0.01 - 0.80%v)
158SB	Styrene (1 - 100 ppm)
103SA	Sulphur Dioxide (0.1 - 3.0%v)
103SB	Sulphur Dioxide (0.02 - 0.30%v)
103SC	Sulphur Dioxide (20 - 300 ppm)
103SD	Sulphur Dioxide (1 - 60 ppm)
103SE	Sulphur Dioxide (0.25 - 10 ppm)
103SG	Sulphur Dioxide – In Carbon Dioxide (0.1 - 25 ppm)
103SF	Sulphur Dioxide – In Flue Gas (0.02 - 0.30%v)
244U	Sulphuric Acid (0.5 - 5.0mg/ℓ)
236SA	1,1,2,2-Tetrachloroethane (20 - 60 ppm)
135SA	Tetrachloroethylene (5 - 300 ppm)
135SB	Tetrachloroethylene (0.2 - 10 ppm)
135SG	Tetrachloroethylene (0.1 - 2.0%v)
135SM	Tetrachloroethylene (50 - 1,250 ppm)
243U	Tetraethoxysilane (5 - 200 ppm)
162U	Tetrahydrofuran (20 - 400 ppm)
124SA	Toluene (10 - 500 ppm)
124SB	Toluene (2 - 100 ppm)
124SH	Toluene (100 - 3,000 ppm)
134SA	Trichloroethylene (5 - 300 ppm)
134SB	Trichloroethylene (0.2 - 36.8 ppm)
134SG	Trichloroethylene (0.05 - 2.0%v)
213S	Triethyl Amine (1 - 20 ppm)
132SA	Vinyl Chloride (0.05 - 1.0%v)
132SB	Vinyl Chloride (5 - 500 ppm)
177SA	Water Vapour (1.7 - 33.8mg/L)
177U	Water Vapour (0.05 - 2.0mg/L)
177UL	Water Vapour (3 - 80LB/MMCF)
177UR	Water Vapour – Ultra Low Range (2 - 12LB/MMCF)
177UR2	Water Vapour (2 - 12LB/MMCF)
143SA	Xylene (5 - 1,000 ppm)
143SB	Xylene (5 - 200 ppm)



# Sensidyne Kits & Accessories



## Sensidyne Gas Detector Tube Pump Kit (PN<sup>o</sup> 830-0001-01)

### Hazardous Material Detection Kit

The Sensidyne Hazmat III Kit is a portable hazardous material detection kit that is lightweight, rugged, and capable of on-the-spot detection of numerous airborne contaminants. The kit utilizes a unique two-step approach for rapid identification of airborne contaminants. The Primary test uses two unique multi-stage qualitative tubes and a special color chart to determine nearly 70 compounds in as little as 2–3 minutes. The kit requires no electrical power or user calibration and comes with a hard-shell, corrosion-resistant polyethylene case.

PN<sup>o</sup> 7013627 Deluxe Hazmat III Kit

### Soil Sampling Kit

Field screening for contaminated soil is fast and easy using the Sensidyne Soil Sampling Kit. A hand operated boring tool is used to make a three foot deep hole in the soil just large enough to accept a special sampling probe with a detector tube inserted. A direct reading vapor zone sample is then made using the hand pump and any one of numerous detector tubes.

PN<sup>o</sup> 7013373 Soil Sampling Kit

### One-Hand Adapter

The one-hand adapter for the Sensidyne Model AP-1S Pump is ideal for one hand sampling from a ladder or into hard-to-reach places. With the adapter installed and a tube inserted, the pump handle can be drawn and locked without actually taking a sample. The pump can then be extended into the sampling area and activated with one hand.

### Extension Hose

An extension hose of either 5 meters or 10 meters in length is available for use in confined space entry, as well as a rigid telescoping extension probe with up to 10 working feet of length. The design of the tube holder at the free end of the hose permits a gas-tight fitting. Since the detector tube is located at the sampling end of the hose, there is no need to allow for the volume of air in the hose line.

PN<sup>o</sup> 830-1001-01 5m Hose

PN<sup>o</sup> 830-1002-01 10m Hose

PN<sup>o</sup> 830-1003-01 10ft Telescoping Probe

### Hot Probe

The Hot Probe allows sampling of gases at elevated temperatures for applications such as auto exhaust or stack emissions testing. The Hot Probe rapidly cools the gas before it enters the detector tube.

PN<sup>o</sup> 7013602 Hot Probe

### Compressed Breathing Air Analysis Kit

The Sensidyne Compressed Breathing Air (CBA) Analysis Kit allows anyone to simply, quickly, and quantitatively measure the quality of their compressed breathing air. Easy to use, the CBA Kit is an accurate and precise method for detecting carbon monoxide, carbon dioxide, oil mist, oxygen, and water vapor (*specific tubes not included*). The CBA Kit measures all four of the common contaminants in breathing air, plus oxygen deficiency. With the CBA Kit, the measurement is quick and simple and doesn't require user calibration.

PN<sup>o</sup> 7015406 CBA Analysis Kit

### Tube Tip Breaker/Cutter

The Tube Tip Breaker/Cutter (PN<sup>o</sup> 7013601) is a convenient container for cutting and breaking detector tubes.