

Tubes for Over 300 Gases & Vapors!

Sensidyne Detector Tube Selection Guide

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**Our tubes
 are now
 SHATTERPROOF**



Detector Tube Selection Guide

How to Use This Guide

2006 ACGIH
TWA = 8 hour Time Weighted Avg.
STEL = 15 minute exposure limit
C = Ceiling Limit

1 ppm = 0.0001 %v
1 %v = 10,000 ppm

Range shown corresponds to all pump stroke combinations. Range on box label may show only the printed scale. Measuring ranges subject to change without notice.

1/2 stroke = 50 ml air
1 stroke = 100 ml air
2 strokes = 200 ml air

Gas or Vapor to be measured	TLV TWA (STEL/Ceiling)	Tube No.	Detector Tube to be used	Measuring Range	No. of Strokes	Notes
Diisobutyl Ketone	25 ppm	139U	Methyl Ethyl Ketone	20-1000 ppm	1	Conversion chart
Diisopropyl Amine	5 ppm	105SD	Ammonia	1-16 ppm	1-5	Conversion chart
Dimethyl Amine	5 ppm (15 ppm)	227S	Dimethyl & Ethyl & Methyl amine	1-20 ppm		
n,n-Dimethyl Aniline	5 ppm (10 ppm)	105SD	Ammonia	0.5-9 ppm	1	Conversion chart
Dimethyl Benzene (see Xylene)						
Dimethyl Ether (Methyl Ether)		123S	Dimethyl Ether	0.01-1.2 %v	1/2-2	
N,N-Dimethylacetamide	10 ppm	229S	N,N-Dimethylacetamide	5-70 ppm	2	
N,N-Dimethylformamide	10 ppm	196S	N,N-Dimethyl Formamide	1-30 ppm	1-2	
1,4 Dioxane (Diethylene Dioxide)	20 ppm	119U	Methyl Alcohol	20-500 ppm	1/2-1	Conversion chart
		139SB	Methyl Ethyl Ketone	0.05-2.5 %v	2	Conversion chart
		154U	Dioxane	20-500 ppm	1-3	

Examples

5 ppm (15 ppm): TLV = 5 ppm, STEL = 15 ppm
(C 7 ppm): Ceiling = 7 ppm
(25 ppm): STEL = 25 ppm

Tube No.
"S" or "U" indicates a printed scale

"Store 40-50°F"
must store tube between 40-50°F (5-10°C)

"Twin tubes"
uses primary and analyzer tubes (5 tests per box)

"Conversion chart"
tube requires the use of a conversion chart to interpret the length of the stain

"Color intensity"
gas concentration is determined by the intensity of the tube stain and not by its length

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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Detector Tube Selection Guide

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)	133A	Acetaldehyde	0.004-1.0 %v	1	Store 40-50° F
		133SB	Acetaldehyde	5-140 ppm	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	
		102SC	Acetone	0.01-4.0 %v	1	Store 40-50° F
		102SD	Acetone	20-5000 ppm	1/2-2	
Acetylene	asphyx	101S	Acetylene	50-1000 ppm	1	
Acetylene & Ethylene (separately measured)		280S	Acetylene & Ethylene	A: 20-300 ppm, E: 200-2000 ppm	1	Twin tubes
Acetylene Dichloride (see 1,2 Dichloroethylene)						
Acrolein	(C 0.1 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 (Vinyl Cyanide)	2 ppm	128SA	Acrylonitrile	0.1-3.5 %v	1	
		128SB	Acrylonitrile	10-500 ppm	1	
		128SC	Acrylonitrile	1-120 ppm	2	Store 40-50° F, Twin tubes
		128SD	Acrylonitrile	0.25-20 ppm	1-4	Store 40-50° F, Twin tubes
Air (Breathing Air) Tubes (see separate listing)						
Allyl Alcohol (Propenyl Alcohol)	0.5 ppm	184S	Methyl Methacrylate & Allyl Alcohol	20-500 ppm	1	Conversion chart
Allyl Chloride (3-Chloroprene)	1 ppm (2 ppm)	132SC	Vinyl Chloride	1-40 ppm	3	Twin tubes, Conversion chart
Amines (see specific Amines)						
Aminobenzene (see Aniline)						
2-Aminoethanol (see Monoethanol Amine)						
2-Aminopropane (see Isopropyl Amine)						
Ammonia	25 ppm (35 ppm)	105SH	Ammonia	0.5-30 %v	1	
		105SA	Ammonia	0.5-10 %v	1	
		105SM	Ammonia	0.1-1.0 %v	1	
		105SB	Ammonia	50-900 ppm	1	
		105SC	Ammonia	5-260 ppm	1-2	
		105SD	Ammonia	0.2-20 ppm	1-5	
Amyl Acetate (see Pentyl Acetate)						
Aniline (Aminobenzene)	2 ppm	181S	Aniline	1-30 ppm	1-2	
Arsine	0.05 ppm	140SA	Arsine	5-160 ppm	1	
		121U	Phosphine & Arsine	0.05-2.0 ppm	1-2	
Arson Investigation (see Hydrocarbons)						
Benzene	0.5 ppm (2.5 ppm)	118SC	Benzene	1-100 ppm	1-4	
		118SD	Benzene	0.1-75 ppm	1-10	Twin tubes
Benzene (in presence of gasoline and/or other aromatic HCs)	0.5 ppm (2.5 ppm)	118SB	Benzene-in presence of Hydrocarbons	5-200 ppm	1	Twin tubes
		118SE	Benzene-in presence of Hydrocarbons	0.2-80 ppm	1-5	Twin tubes
Benzyl Chloride	1 ppm	132SC	Vinyl Chloride	1-16 ppm	1	Twin tubes, Conversion chart
Breathing Air Tubes (see Separate Listing)						
Bromine	0.1 ppm (0.2 ppm)	114	Bromine	1-20 ppm	1	
Bromochloromethane (Chlorobromomethane)	200 ppm	157SB	Methyl Bromide	5-400 ppm	1/2-1	Store 40-50° F, Twin tubes, Conversion chart
Bromoform (Tribromomethane)	0.5 ppm	157SB	Methyl Bromide	0.5-20 ppm	1-2	Store 40-50° F, Twin tubes, Conversion chart
Bromomethane (see Methyl Bromide)						

Detector Tube Selection Guide

Gas or Vapor to be measured	TLV TWA (STEL/Ceiling)	Tube No.	Detector Tube to be used	Measuring Range	No. of Strokes	Notes
1,3 Butadiene	2 ppm	168SA	Butadiene	0.03-2.6 %v	1	
		168SB	Butadiene	30-600 ppm	1	
		168SC	Butadiene	2.5-100 ppm	1-2	
		168SD	Butadiene	0.5-10 ppm	1	Twin tubes
Butane		221SA	Butane	0.05-0.6 %v	1	
2-Butanol (sec-Butyl Alcohol)	100 ppm	189U	2-Butanol	4-300 ppm	2-4	
1-Butanol (n-Butyl Alcohol)	20 ppm	190U	Ethyl & Methyl Cellosolve	5-100 ppm	3	Conversion chart
2-Butanone (see Methyl Ethyl Ketone)						
2-Butoxyethanol (see Butyl Cellosolve)						
Butyl Acetate	150 ppm (200 ppm)	138U	Butyl Acetate	10-400 ppm	1	
		139SB	Methyl Ethyl Ketone	0.01-1.0 %v	2	Conversion chart
Butyl Acrylate	2 ppm	211U	Ethyl & Butyl & Isobutyl Acrylate	5-60 ppm	2	
Butyl Alcohol (see 1-Butanol)						
sec-Butyl Alcohol (see 2-Butanol)						
Butyl Amine	(C 5 ppm)	105SD	Ammonia	1-20 ppm	1	Conversion chart
Butyl Cellosolve (Ethylene Glycol Monobutyl Ether, 2-Butoxyethanol)	20 ppm	190U	Ethyl & Methyl Cellosolve	10-1000 ppm	3	
Butyl Ether		111U	Isopropyl & Ethyl Acetate	10-1200 ppm	1	Conversion chart
tert-Butyl Mercaptan		130U	Mercaptans	0.5-10 ppm	1/2-1	
Butyl Methacrylate		111U	Isopropyl & Ethyl Acetate	10-1000 ppm	1	Conversion chart
t-Butyl Methyl Ether (MTBE)	20 ppm	111U	Isopropyl & Ethyl Acetate	25-500 ppm	1	Conversion chart
Butyric Acid		216S	Acetic Acid	3-60 ppm	1	Conversion chart
Carbon Dioxide	5000 ppm (30,000 ppm)	126UH	Carbon Dioxide	5-50 %v	1/2	
		126SH	Carbon Dioxide	1-20 %v	1	
		126SA	Carbon Dioxide	0.1-2.6 %v	1	
		126SG	Carbon Dioxide	0.02-1.4 %v	1/2-1	
		126SB	Carbon Dioxide	0.05-1.0 %v	1	
		126B	Carbon Dioxide	0.01-0.7 %v (100-7000 ppm)	1-3	Uses chart
		126SF	Carbon Dioxide	100-4000 ppm	1/2-1	
Carbon Disulfide	1 ppm	141SA	Carbon Disulfide	30-500 ppm	1	Store 40-50° F, Twin tubes
		141SB	Carbon Disulfide	0.8-50 ppm	2-4	Store 40-50° F, Twin tubes
Carbon Monoxide	25 ppm	106UH	Carbon Monoxide	0.1-20 %v	1/2-1	
		106SH	Carbon Monoxide	0.1-2.0 %v	1	
		106SA	Carbon Monoxide	5-1000 ppm	1-4	
		106S	Carbon Monoxide	10-250 ppm	3	
		106SC	Carbon Monoxide	1-50 ppm	1	
Carbon Tetrachloride	5 ppm (10 ppm)	147S	Carbon Tetrachloride	0.5-60 ppm	1-2	Twin tubes
Carbonyl Chloride (see Phosgene)						
Carbonyl Sulfide		239S	Carbonyl Sulfide	5-60 ppm	1	Twin tubes
Chlorine	0.5 ppm (1 ppm)	109SA	Chlorine	1-40 ppm	1	
		109SB	Chlorine	0.1-10 ppm	1-5	
		109U	Chlorine	0.05-2.0 ppm	1-2	
Chlorine Dioxide	0.1 ppm (0.3 ppm)	116	Chlorine Dioxide	1-20 ppm	1	
		109SB	Chlorine	0.1-2.0 ppm	5	
Chlorobromomethane (see Bromochloromethane)						
Chloropropylene (see Epichlorohydrine)						
3-Chloroprene (see Allyl Chloride)						

Detector Tube Selection Guide

Gas or Vapor to be measured	TLV TWA (STEL/Ceiling)	Tube No.	Detector Tube to be used	Measuring Range	No. of Strokes	Notes
Chlorobenzene (Monochlorobenzene)	10 ppm	1785B	Chlorobenzene	1-140 ppm	1-5	Twin tubes
2- Chlorobutadiene-1,3 (see Chloroprene)						
Chloroethylene (see Vinyl Chloride)						
Chloroform (Trichloromethane)	10 ppm	152S	Chloroform	23-500 ppm	2-4	Store 40-50° F, Twin tubes
		180S	Dichloromethane	70-400 ppm	2	Conversion chart
Chloropicrin (Nitro-trichloromethane)	0.1 ppm	172S	Chloropicrin	0.05-16 ppm	1-2	Store 40-50° F, Twin tubes
Chloroprene (2- Chlorobutadiene-1,3)	10 ppm	169S	Chloroprene	0.5-20 ppm	1-2	Twin tubes
m-Chlorotoluene		1325C	Vinyl Chloride	0.5-10 ppm	2	Twin tubes, Conversion chart
o-Chlorotoluene	50 ppm	1325C	Vinyl Chloride	1-50 ppm	2	Twin tubes, Conversion chart
p-Chlorotoluene		1325C	Vinyl Chloride	1-50 ppm	2	Twin tubes, Conversion chart
Compressed Breathing Air Tubes (see Separate Listing)						
Cresol	5 ppm	183U	Phenol & Cresol	0.5- 25 ppm	2	
Crotonaldehyde	(C 0.3 ppm)	190U	Ethyl & Methyl Cellosolve	2-40 ppm	3	Conversion chart
Cumene (Isopropyl Benzene)	50 ppm	111U	Isopropyl & Ethyl Acetate	20-140 ppm	1	Conversion chart
Cyanide (see Hydrogen Cyanide)						
Cyclohexane	100 ppm	115S	Cyclohexane	0.01-0.6 %v	1	
		1135B	Hexane	50-1400 ppm	1	Conversion chart
		187S	General Hydrocarbons	50-1400 ppm	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	1055D	Ammonia	1-20 ppm	1	
Decahydronaphthalene		111U	Isopropyl & Ethyl Acetate	20-200 ppm	1	Conversion chart
Decane		111U	Isopropyl & Ethyl Acetate	5-90 ppm	1	Conversion chart
Di-n-Butyl Amine (Dibutyl Amine)		1055D	Ammonia	2-20 ppm	1	Conversion chart
Di-n-Propyl Amine		1055D	Ammonia	1-14 ppm	1	Conversion chart
Diacetone Alcohol (4-Hydroxy-4-Methyl-2-Pentanone)	50 ppm	190U	Ethyl & Methyl Cellosolve	10-250 ppm	3	Conversion chart
Diamine (see Hydrazine)						
Diborane	0.1 ppm	242S	Diborane	0.02-5.0 ppm	1-5	Store 40-50° F
1,2 Dibromoethane (see Ethylene Dibromide)						
o-Dichlorobenzene	25 ppm (50 ppm)	214S	o-Dichlorobenzene	5-100 ppm	1	
p-Dichlorobenzene	10 ppm	215S	p-Dichlorobenzene	10-150 ppm	1	Store 40-50° F
1,2 Dichloroethane (Ethylene Dichloride)	10 ppm	230S	1,2-Dichloroethane	5-50 ppm	1	Store 40-50° F, Twin Tubes
1,1 Dichloroethane (Ethylidene Chloride)	100 ppm	235S	1,1-Dichloroethane	10-160 ppm	1	Store 40-50° F, Twin Tubes
1,1-Dichloroethylene (Vinylidene Chloride)	5 ppm	1325C	Vinyl Chloride	1-22 ppm	1	Twin tubes, Conversion chart
2,2 Dichloroethyl Ether	5 ppm	223S	2,2-Dichloroethyl Ether	2-30 ppm	1	Twin tubes
1,2 Dichloroethylene (Acetylene Dichloride)	200 ppm	145S	1,2-Dichloroethylene	5-400 ppm	1	Store 40-50° F, Twin Tubes
Dichloromethane (Methylene Chloride)	50 ppm	180S	Dichloromethane	10-1000 ppm	2-4	Store 40-50° F, Twin tubes

Detector Tube Selection Guide

Gas or Vapor to be measured	TLV TWA (STEL/Ceiling)	Tube No.	Detector Tube to be used	Measuring Range	No. of Strokes	Notes
1,2-Dichloropropane (Propylene Dichloride)	10 ppm	157SB	Methyl Bromide	20-250 ppm	1	Store 40-50° F, Twin tubes, Conversion chart
1,3 Dichloropropane	1 ppm	194S	1,3-Dichloropropane	10-500 ppm	1	Store 40-50° F, Twin tubes
1,3 Dichloropropene	1 ppm	132SC	Vinyl Chloride	1-10 ppm	1	Twin tubes, Conversion chart
Dicyclopentadiene	5 ppm	190U	Methyl Cellosolve	2-60 ppm	3	Conversion chart
Diethyl Amine	5 ppm (15 ppm)	222S	Diethyl & Trimethyl Amine	1-20 ppm	1	
		105SD	Ammonia	1-20 ppm	1	
Diethyl Benzene		111U	Isopropyl & Ethyl Acetate	10-180 ppm	1	Conversion chart
Diethyl Ether (Ethyl Ether)	400 ppm (500 ppm)	107SA	Diethyl Ether (Ether)	0.04-1.4 %v	1	
		107U	Diethyl Ether (Ether)	20-400 ppm	1	
Diethylene Dioxide (see 1,4 Dioxane)						
Diisobutyl Ketone	25 ppm	139U	Methyl Ethyl Ketone	20-1000 ppm	1	Conversion chart
Diisopropyl Amine	5 ppm	105SD	Ammonia	1-16 ppm	1	Conversion chart
Dimethyl Amine	5 ppm (15 ppm)	227S	Dimethyl & Ethyl & Methyl Amine	1-20 ppm	1	
		105SD	Ammonia	1-20 ppm	1	Conversion chart
n,n-Dimethyl Aniline	5 ppm (10 ppm)	105SD	Ammonia	0.5-9.0 ppm	1	Conversion chart
Dimethyl Benzene (see Xylene)						
Dimethyl Ether (Methyl Ether)		123S	Dimethyl Ether	0.01-1.2 %v	1	
N,N-Dimethylacetamide	10 ppm	229S	N,N-Dimethylacetamide	5-70 ppm	2	
N,N-Dimethylformamide	10 ppm	196S	N,N-Dimethyl Formamide	1-30 ppm	1-2	
1,4 Dioxane (Diethylene Dioxide)	20 ppm	119U	Methyl Alcohol	20-500 ppm	1	Conversion chart
		139SB	Methyl Ethyl Ketone	0.05-2.5 %v	2	Conversion chart
Dipropyl Amine		105SD	Ammonia	1-14 ppm	1	Conversion chart
Disilane		240S	Silane	1-50 ppm	1	Store 40-50° F, Conversion chart
Epichlorohydrin (Chloropropylene Oxide)	0.5 ppm	192S	Epichlorohydrin	5-50 ppm	3	Twin tubes
Epoxythane (see Ethylene Oxide)						
Ethanethiol (see Ethyl Mercaptan)						
Ethanol (see Ethyl Alcohol)						
Ethanol Amine (see Monoethanol Amine)						
Ethene (see Ethylene)						
Ethylene Glycol Monobutyl Ether (see Butyl Cellosolve)						
2-Ethoxyethanol (see Ethyl Cellosolve)						
Ethyl Acetate	400 ppm	111SA	Ethyl Acetate	0.1-5.0 %v	1	
		111U	Isopropyl & Ethyl Acetate	10-1000 ppm	1	
Ethyl Acrylate	5 ppm (15 ppm)	211U	Ethyl & Butyl & Isobutyl acrylate	5-60 ppm	2	Conversion chart
Ethyl Alcohol (Ethanol)	1000 ppm	104SA	Ethyl Alcohol	0.05-5.0 %v	1	
		150U	Isopropyl Alcohol	20-800 ppm	1	Conversion chart
Ethyl Amine	5 ppm (15 ppm)	227S	Dimethyl & Ethyl & Methyl amine	1-20 ppm	1	
		105SD	Ammonia	1-20 ppm	1	Conversion chart
Ethyl Benzene	100 ppm (125 ppm)	179S	Ethyl Benzene	10-500 ppm	1	
		124SB	Toluene	2-100 ppm	1	Conversion chart
Ethyl Bromide	5 ppm	157SB	Methyl Bromide	20-400 ppm	1/2	Store 40-50° F, Twin tubes, Conversion chart
Ethyl Cellosolve (Ethylene Glycol Monoethyl Ether, 2-Ethoxyethanol)	5 ppm	190U	Ethyl & Methyl Cellosolve	5-500 ppm	3	
Ethyl Cellosolve Acetate (Ethylene Glycol Ethyl Ether Acetate)		190U	Ethyl & Methyl Cellosolve	5-150 ppm	3	Conversion chart
Ethyl Chloride	100 ppm	157SB	Methyl Bromide	2-200 ppm	1	Conversion chart
Ethyl Ether (see Diethyl Ether)						

Detector Tube Selection Guide

Gas or Vapor to be measured	TLV TWA (STEL/Ceiling)	Tube No.	Detector Tube to be used	Measuring Range	No. of Strokes	Notes
Ethyl Mercaptan (Ethanethiol)	0.5 ppm	130U	Mercaptans	0.5-10 ppm	1/2-1	
		165SA	Ethyl Mercaptan	1-160 ppm	1-4	
		165SB	Ethyl Mercaptan [in LP Gas]	2.5-80 ppm	1/2-1	
Ethyl Methacrylate		111U	Isopropyl & Ethyl Acetate	20-500 ppm	1	Conversion chart
ethylene (Ethene)	200 ppm	108B	Ethylene	0.1-100 ppm	1-5	Color intensity
		108SA	Ethylene	20-1200 ppm	1	
Ethylene Chlorohydrin	(C 1 ppm)	119U	Methyl Alcohol	5-300 ppm	3	Conversion chart
Ethylene Dibromide (1,2 Dibromoethane)	[skin]	166S	Ethylene Dibromide	1-50 ppm	1	Store 40-50° F, Twin tubes
Ethylene Dichloride (see 1,2 Dichloroethane)						
Ethylene Glycol (Monoethylene Glycol, Automotive Anti-Freeze)	(C 100mg/M ³)	232SA	Ethylene Glycol	20-250 mg/M ³	2	Twin tubes
		232SB	Ethylene Glycol	3-40 mg/M ³	3	Twin tubes
Ethylene Glycol Ethyl Ether Acetate (see Ethyl Cellosolve Acetate)						
Ethylene Glycol Monomethyl Ether (see Methyl Cellosolve)						
Ethylene Glycol Monoethyl Ether (see Ethyl Cellosolve)						
Ethylene Oxide (Epoxyethane)	1 ppm	122SA	Ethylene Oxide	0.01-4.0 %v	1/2-1	
		122SM	Ethylene Oxide	5-100 ppm	3	
		122SC	Ethylene Oxide	1-15 ppm	3	Twin tubes
Ethylidene Chloride (see 1,1 Dichloroethane)						
5-Ethylidene-2-Norborene	(C 5 ppm)	190U	Ethyl & Methyl Cellosolve	1-50 ppm	3	Conversion chart
Formaldehyde	(C 0.3 ppm)	171SA	Formaldehyde	20-1500 ppm	1	Store 40-50° F, Twin tubes
		171SB	Formaldehyde	1-35 ppm	3	Twin tubes
		171SC	Formaldehyde	0.05-4.0 ppm	5-10	Store 40-50° F
Formic Acid	5 ppm (10 ppm)	216S	Acetic Acid	1-50 ppm	1	
Furfuraldehyde (see Furfural)						
Furan (Furfuran)		122SA	Ethylene Oxide	0.01-2.0 %v	1/2-1	Conversion chart
Furfural (Furfuraldehyde)	2 ppm	190U	Ethyl & Methyl Cellosolve	2-60 ppm	3	Conversion chart
Furfuran (see Furan)						
Furfuryl Alcohol	10 ppm (15 ppm)	238S	Furfuryl Alcohol	2-25 ppm	5	
Gasoline	300 ppm (500 ppm)	110S	Gasoline	0.05-0.6 %v	1	
		187S	General Hydrocarbons	50-1400 ppm	1	
General Hydrocarbons		187S	General Hydrocarbons	50-1400 ppm (as Hexane)	1	
Heptane	400 ppm (500 ppm)	113SB	Hexane	100-2000 ppm	1	Conversion chart
		187S	General Hydrocarbons	75-2100 ppm	1	
Hexane	50 ppm	113SA	Hexane	0.05-0.6 %v	1	
		113SB	Hexane	50-1400 ppm	1	
		187S	General Hydrocarbons	50-1400 ppm	1	
		113SC	Hexane	5-800 ppm	1-3	
Hexone (see Methyl Isobutyl Ketone)						
Hydrazine (Diamine)	0.01 ppm	219S	Hydrazine	0.05-10 ppm	1-4	
Hydrocarbons (Arson Tube) (also see General Hydrocarbons)		290PII	Hydrocarbons (Arson Tube)	Qualitative	1	For arson investigation
Hydrochloric Acid (see Hydrogen Chloride)						
Hydrocyanic Acid (see Hydrogen Cyanide)						
Hydrofluoric Acid (see Hydrogen Fluoride)						
Hydrogen	asphyx	137U	Hydrogen	0.05-0.8 %v	1/2	5 tests per box
Hydrogen Chloride (Hydrochloric Acid)	(C 2ppm)	173SA	Hydrogen Chloride	20-1200 ppm	1/2-1	Twin tubes
		173SB	Hydrogen Chloride	0.4-40 ppm	1/2-5	Twin tubes

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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 (Hydrocyanic Acid)	(C 4.7 ppm)	112SA	Hydrogen Cyanide	0.01-3.0 %v	1	
		112SB	Hydrogen Cyanide	0.5-100 ppm	1-4	Store 40-50° F
		112SC	Hydrogen Cyanide	0.3-8 ppm	3	Twin tubes
Hydrogen Fluoride (Hydrofluoric Acid)	(C 2 ppm) 0.5 ppm	156S	Hydrogen Fluoride	0.25-30 ppm	3-6.	
Hydrogen Peroxide	1 ppm	247S	Hydrogen Peroxide	0.5-10 ppm	5	
Hydrogen Selenide	0.05 ppm	167S	Hydrogen Selenide	1-600 ppm	1-5	
		242S	Diborane	0.5-20 ppm	1-2	Store 40-50° F, Conversion chart
Hydrogen Sulfide	10 ppm (15 ppm)	120UT	Hydrogen Sulfide	2.5-40 %v	1/2-1	5 tests per box
		120UH	Hydrogen Sulfide	2-20 %v	1/2	
		120SH	Hydrogen Sulfide	0.1-4.0 %v	1	
		120SC	Hydrogen Sulfide in presence of SO ₂	0.005-0.16 %v	1	
		120SM	Hydrogen Sulfide	0.05-1.2 %v	1/2-1	
		120SF	Hydrogen Sulfide	25-2000 ppm	1/2-2	
		120SB	Hydrogen Sulfide	0.75-300 ppm	1/2-4	
		120SD	Hydrogen Sulfide	1-60 ppm	1/2-1	
		120SE	Hydrogen Sulfide	0.5-40 ppm	1/2-2	
		120U	Hydrogen Sulfide	0.2-6.0 ppm	1/2-1	
		120GT	Hydrogen Sulfide	0.25-4 gr/100CF	1/2-1	
120GR	Hydrogen Sulfide	0.025-0.4 gr/100CF	1/2-1			
Hydrogen Sulfide & Mercaptans (separately measured)		282S	Hydrogen Sulfide & Mercaptans	H ₂ S: 1-30 ppm, Mer: 0.5-5.0 ppm	1	Twin tubes
4-Hydroxy-4-Methyl-2-Pentanone (see Diacetone Alcohol)						
Inorganic Qualitative		131	Inorganic Qualitative	Qual (12 gases)	1	
Iodine	(c 0.1 ppm)	117SB	Nitrogen Dioxide	0.7 to 42 ppm	1	Conversion chart
Iodomethane (see Methyl Iodide)						
Ion Tubes (see Separate Listing)						
Isoamyl Acetate (Isopentyl Acetate)		188U	Isoamyl Acetate	10-400 ppm	1	
Isoamyl Alcohol (see Isopentyl Alcohol)						
Isobutane		1135B	Hexane	50-1200 ppm	1	Conversion chart
		187S	General Hydrocarbons	40-1120 ppm	1	
Isobutanol (see Isobutyl Alcohol)						
Isobutene (see Isobutylene)						
Isobutyl Acetate	150 ppm	153U	Isobutyl Acetate	10-400 ppm	2	
		1395B	Methyl Ethyl Ketone	0.01-1.4 %v	2	Conversion chart
Isobutyl Acrylate		211U	Ethyl & Butyl & Isobutyl Acrylate	5-60 ppm	2	Conversion chart
Isobutyl Alcohol (Isobutanol)	50 ppm	208U	Isobutyl Alcohol	5-100 ppm	3	
Isobutylene (Isobutene)		1135B	Hexane	0.03-2.0 %v	1	Conversion chart
Isobutyric Acid		216S	Acetic Acid	3-50 ppm	1	Conversion chart
Isopentyl Acetate (see Isoamyl Acetate)						
Isopentyl Alcohol (Isoamyl 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 (2-Methyl-1,3-Butadiene)		190U	Ethyl & Methyl Cellosolve	1-16 ppm	3	Conversion chart
2-Isopropoxyethanol (see Isopropyl Cellosolve)						
Isopropyl Acetate	100 ppm (200 ppm)	1395B	Methyl Ethyl Ketone	0.01- 1.2 %v	2	
		111U	Isopropyl & Ethyl Acetate	10-1000 ppm	1	
Isopropyl Acetone (see Methyl Isobutyl Ketone)						
Isopropyl Alcohol (2-Propanol)	200 ppm (400 ppm)	150U	Isopropyl Alcohol	20-1200 ppm	1-2	
		1225A	Ethylene Oxide	0.05-2.5 %v	1	Conversion chart

Detector Tube Selection Guide

Gas or Vapor to be measured	TLV TWA (STEL/Ceiling)	Tube No.	Detector Tube to be used	Measuring Range	No. of Strokes	Notes
Isopropyl Amine (2-Aminopropane)	5 ppm (10 ppm)	222S	Diethyl & Trimethyl Amine	1-12 ppm	1	Conversion chart
Isopropyl Benzene (see Cumene)						
Isopropyl Cellosolve (2-Isopropoxyethanol)	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	
Isopropylacetic Acid (see Isovaleric Acid)						
Isovaleric Acid (Isopropylacetic Acid)		216S	Acetic Acid	3-50 ppm	1	Conversion chart
Kerosene	200 mg/M ³	187S	General Hydrocarbons	8-32 mg/l	2	Conversion chart
Long Duration (TWA) Tubes (see Separate Listing)						
Maleic Anhydride	0.1 ppm	216S	Acetic Acid	0.2-10 ppm	4	Conversion chart
Mercaptans (see specific Methyl, Ethyl, & Butyl Mercaptans)						
Mercury Vapor	0.025 mg/M ³	142S	Mercury Vapor	0.1-10 mg/M ³	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
Methanethiol (see Methyl Mercaptan)						
Methanol (see Methyl Alcohol)						
2-Methoxyethanol (see Methyl Cellosolve)						
1-Methoxy-2-Propanol (see Propylene Glycol Monomethyl Ether)						
Methyl Acetate	200 ppm (250 ppm)	111SA	Ethyl Acetate	0.1-3.0 ppm	1	Conversion chart
Methyl Acrylate	2 ppm	211U	Ethyl & Butyl & Isobutyl Acrylate	5-60 ppm	2	
Methyl Alcohol (Methanol)	200 ppm (250 ppm)	119SA	Methyl Alcohol	0.05-6.0 %v	1	
		119U	Methyl Alcohol	20-1000 ppm	1	
Methyl Amine (Monoethyl Amine)	5 ppm (15 ppm)	227S	Dimethyl & Ethyl & Methyl Amine	1-20 ppm	1	
		105SD	Ammonia	1-20 ppm	1	Conversion chart
Methyl Aniline	0.5 ppm	105SD	Ammonia	0.5-6.0 ppm	2	
Methyl Benzene (see Toluene)						
Methyl Bromide (Bromomethane)	1 ppm	157SA	Methyl Bromide	10-500 ppm	1	Store 40-50° F, Twin tubes
		157SB	Methyl Bromide	0.4-80 ppm	1-4	Store 40-50° F, Twin tubes
Methyl Butyl Ketone	5 ppm (10 ppm)	237S	Vinyl Acetate	5-80 ppm	1	Conversion chart
Methyl Cellosolve (Ethylene Glycol Monomethyl Ether, 2-Methoxyethanol)	0.1 ppm	190U	Ethyl & Methyl Cellosolve	5-500 ppm	3	
Methyl Chloroform (1,1,1-Trichloroethane)	350 ppm (450 ppm)	160S	Methyl Chloroform (1,1,1-Trichloroethane)	15-400 ppm	1-2	Store 40-50° F, Twin tubes
Methyl Cyclohexane	400 ppm	113SB	n-Hexane	100-1600 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 Ether (see Dimethyl Ether)						
Methyl Ethyl Ketone (2-Butanone)	200 ppm (300 ppm)	122SA	Ethylene Oxide	0.05-5.0 %v	1/2-1	Conversion chart
		139SB	Methyl Ethyl Ketone	0.01-1.4 %v	2	
		139U	Methyl Ethyl Ketone	20-1500 ppm	1	
Methyl Hydrazine (Monomethyl Hydrazine)	0.01 ppm	219S	Hydrazine	0.1-6.0 ppm	2	Conversion chart
Methyl Iodide (Iodomethane)	2 ppm	176S	Methyl Iodide	5-40 ppm	2	Store 40-50° F, Twin tubes
Methyl Isobutyl Ketone (Hexone, Isopropyl Acetone)	50 ppm (75 ppm)	155U	Methyl Isobutyl ketone	5-300 ppm	1	
		122SA	Ethylene Oxide	0.01-0.6 %v	3	Conversion chart
Methyl Isothiocyanide		111U	Isopropyl & Ethyl Acetate	10-200 ppm	2	Conversion chart

Detector Tube Selection Guide

Gas or Vapor to be measured	TLV TWA (STEL/Ceiling)	Tube No.	Detector Tube to be used	Measuring Range	No. of Strokes	Notes
Methyl Mercaptan (Methanethiol)	0.5 ppm	130U	Mercaptans	0.5-10 ppm	1/2-1	
		164SA	Methyl Mercaptan	5-140 ppm	1	
		164SH	Methyl Mercaptan	50-2400 ppm	1	
Methyl Methacrylate	50 ppm (100 ppm)	184S	Methyl Methacrylate & Allyl Alcohol	10-160 ppm	1	
Methyl Styrene	50 ppm (100 ppm)	193S	Methyl Styrene	10-500 ppm	1	
2-Methyl-1,3-Butadiene (see Isoprene)						
Methyl tert Butyl Ether (see tert-Butyl Methyl Ether)						
Methylene Chloride (see Dichloromethane)						
Mineral Spirits		187S	General Hydrocarbons	10-40 mg/l	2	
Mineral Turpentine	100 ppm	111U	Isopropyl & Ethyl Acetate	4-200 ppm	1	Conversion chart
		187S	General Hydrocarbons	10-40 mg/l	2	Conversion chart
Monochlorobenzene (see Chlorobenzene)						
Monoethanol Amine (Ethanalamine) or (2-Aminoethanol)	3 ppm (6 ppm)	224SA	Monoethanol Amine	0.5-50 ppm	1-2	
Monoethyl Amine (see Ethyl Amine)						
Monoethylene Glycol (see Ethylene Glycol)						
Monomethyl Hydrazine (see Methyl Hydrazine)						
Morpholine	20 ppm	105SD	Ammonia	2-22 ppm	1	Conversion chart
MTBE (see tert-Butyl Methyl Ether)						
Naphthalene	10 ppm (15 ppm)	153U	Isobutyl Acetate	10-100 ppm	1	
Nickel Carbonyl (Nickel Tetracarbonyl)	0.05 ppm	129	Nickel Carbonyl	20-700 ppm	1	
Nickel Tetracarbonyl (see Nickel Carbonyl)						
Nitric Acid Vapor	2 ppm (4 ppm)	233S	Nitric Acid Vapor	1-20 ppm	1-2	
Nitric Oxide (NO & NO ₂ separately measured)	NO: 25 ppm NO ₂ : 3 ppm (5 ppm)	174A	Nitric Oxide (NO & NO ₂ separately measured)	NO: 10-300 ppm, NO ₂ : 1-40 ppm	1	5 tests per box
		174B	Nitric Oxide (NO & NO ₂ separately measured) [Flue Gas Kit Version]	NO: 10-300 ppm, NO ₂ : 1-40 ppm	1	5 tests per box
Nitrogen Dioxide	3 ppm (5 ppm)	117SA	Nitrogen Dioxide	20-1000 ppm	1	
		117SB	Nitrogen Dioxide	0.5-30 ppm	2	
		117SD	Nitrogen Dioxide	0.1-10 ppm	3	5 tests per box
Nitrogen Oxides (NO _x)	NO: 25 ppm, NO ₂ : 3 ppm (5 ppm)	175SH	Nitrogen Oxides	100-2500 ppm	1	
		175SA	Nitrogen Oxides	20-250 ppm	1	
		175U	Nitrogen Oxides	0.5-30 ppm	1/2-1	
Nitro-trichloromethane (see Chloropicrin)						
Nonane	200 ppm	111U	Isopropyl & Ethyl Acetate	5-160 ppm	1/2-1	Conversion chart
Octane	300 ppm	187S	General Hydrocarbons	100-2800 ppm	1	
Organic Gas Checker		186	Organic compounds	5-2500 ppm (Qual)	1	
Organic Gas Qualitative Tube		186B	Organic compounds	Qual (41 compounds)	1	
Oxygen & Carbon Dioxide (separately measured)		281S	Oxygen & Carbon Dioxide	O ₂ : 2-10 %v, CO ₂ : 1-20 %v	1	
Oxygen		159S C	Oxygen	1.5-24 %v	1/2-1	Twin tubes
Ozone	0.05 ppm (Heavy Work Load)	182SA	Ozone	50-1000 ppm	1/2-1	
		182SB	Ozone	2.5-100 ppm	1/2-2	
		182U	Ozone	0.025-3.0 ppm	1-6	
Pentane	600 ppm	113SB	n-Hexane	50-1000 ppm	1	Conversion chart
		187S	General Hydrocarbons	40-1120 ppm	1	
Pentyl Acetate (Amyl Acetate)	50 ppm (100 ppm)	210U	Pentyl Acetate	10-200 ppm	3	
Pentyl Amine		105SD	Ammonia	2-22 ppm	1	Conversion chart

Detector Tube Selection Guide

Gas or Vapor to be measured	TLV TWA (STEL/Ceiling)	Tube No.	Detector Tube to be used	Measuring Range	No. of Strokes	Notes
Perchloroethylene (see Tetrachloroethylene)						
Phenol	5 ppm	183U	Phenol & Cresol	0.5-25 ppm	2	
Phosgene (Carbonyl Chloride)	0.1 ppm	146S	Phosgene	0.1-20 ppm	1-5	Store 40-50° F
Phosphine	0.3 ppm (1 ppm)	121SH	Phosphine	100-3200 ppm	1/2-1	
		121SC	Phosphine	20-700 ppm	1	
		121SD	Phosphine	0.25-20 ppm	1/2-2	
		121U	Phosphine & Arsine	0.05-2.0 ppm	1-2	
a-Pinene		158S	Styrene	20-300 ppm	1	Conversion chart
Propane	1000 ppm	125SA	Propane	0.02-0.5 %v	1	
1-Propanol (n-Propyl Alcohol)	200 ppm (400 ppm)	190U	Ethyl & Methyl Cellosolve	20-300 ppm	1	Conversion chart
2-Propanol (see Isopropyl Alcohol)						
Propenyl Alcohol (see Allyl Alcohol)						
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
		151U	Propyl Acetate	20-1000 ppm	1	
n-Propyl Alcohol (see 1-Propanol)						
Propyl Amine		105SD	Ammonia	1-20 ppm	1	Conversion chart
n-Propyl Bromide		157SA	Methyl Bromide	10-500 ppm	1	
		157SB	Methyl Bromide	5-80 ppm	1	Conversion chart
Propyl Mercaptan		130U	Mercaptans	0.5-10 ppm	1/2-1	
Propylene	500 ppm	185S	Propylene	50-1000 ppm	1	
Propylene Dichloride (see 1,2-Dichloropropane)						
Propylene Glycol Monomethyl Ether (1-Methoxy-2-Propanol)	100 ppm (150 ppm)	197U	Cyclohexanone	10-500 ppm	1	Conversion chart
Propylene Oxide	2 ppm	163SA	Propylene Oxide	0.05-5.0 %v	1/2-1	Twin tubes, Conversion chart
		190U	Ethyl & Methyl Cellosolve	5-400 ppm	3	Conversion chart
		122SC	Ethylene Oxide	1-70 ppm	1-3	Twin tubes, Conversion chart
Pyridine	1 ppm	105SD	Ammonia	0.1-10 ppm	1/2-1	Multiply reading by 0.5
Rainbow Tube (see Inorganic Qualitative & Organic Gas Qualitative)						
Silane (Silicon Tetrahydride)	5 ppm	240S	Silane	0.5-50 ppm	1-2	Store 40-50° F
Silicon Tetrahydride (see Silane)						
Styrene	20 ppm (40 ppm)	158S	Styrene	2.5-300 ppm	1-2	
		158SB	Styrene	1-100 ppm	2-4	Twin tubes
Sulfur Dioxide	2 ppm (5 ppm)	103SA	Sulfur Dioxide	0.1-3.0 %v	1	
		103SB	Sulfur Dioxide	0.02-0.3 %v	1	
		103SF	Sulfur Dioxide (in flue gas)	0.02-0.3 %v	1	
		103SC	Sulfur Dioxide	20-300 ppm	1	
		103SD	Sulfur Dioxide	1-60 ppm	1	
		103SE	Sulfur Dioxide	0.25-10 ppm	1-2	Store 40-50° F,
103SG	Sulfur Dioxide (in CO ₂)	0.1-25 ppm	1-4			
Sulfuric Acid	0.2 mg/M ³	244 U	Sulfuric Acid	0.5-5.0 mg/M ³	5	
1,1,2,2-Tetrachloroethane	1 ppm	236S	1,1,2-Trichloromethane	5-50 ppm	3	Conversion chart
Tetrachloroethylene (Perchloroethylene)	25 ppm (100 ppm)	135SA	Tetrachloroethylene (Perchloroethylene)	5-300 ppm	1/2-1	Store 40-50° F
		135SB	Tetrachloroethylene	0.2-10 ppm	1-4	Store 40-50° F
		135SH	Tetrachloroethylene	0.05-2.0 %v	1/2-1	5 tests per box
Tetrachloromethane (see Carbon Tetrachloride)						
Tetraethoxysilane		243U	Tetraethoxysilane	5-200 ppm	1-2	

Detector Tube Selection Guide

Gas or Vapor to be measured	TLV TWA (STEL/Ceiling)	Tube No.	Detector Tube to be used	Measuring Range	No. of Strokes	Notes
Tetrahydrofuran	50ppm (100 ppm)	102SA	Acetone	0.2-5.0 %v	1/2-1	Conversion chart
		162U	Tetrahydrofuran	20-400 ppm	1	
Tetrahydrothiophene (Thiophane)		190U	Ethyl & Methyl Cellosolve	4-100 ppm	3	Conversion chart
Thiophane (see Tetrahydrothiophene)						
Toluene (Methyl Benzene)	50 ppm	124SH	Toluene	100-3000 ppm	1	
		124SA	Toluene	10-500 ppm	1	
		124SB	Toluene	2-100 ppm	1	
o-Toluidine	2 ppm	105SD	Ammonia	2-22 ppm	1	Conversion chart
p-Toluidine	2 ppm	105SD	Ammonia	2-20 ppm	1	Conversion chart
Tribromomethane (see Bromoform)						
1,1,2-Trichloroethane (Vinyl Trichloride)	10 ppm	236S	1,1,2-Trichloroethane	10-100 ppm	1	Store 40-50° F, Twin tubes
1,1,1-Trichloroethane (see Methyl Chloroform)						
Trichloroethylene	50 ppm (100 ppm)	134SA	Trichloroethylene	5-300 ppm	1/2-1	Store 40-50° F
		134SB	Trichloroethylene	0.2-16 ppm	1-4	Store 40-50° F
		134SH	Trichloroethylene	0.05-2.0 %v	1/2-1	
Trichloromethane (see Chloroform)						
Trichlorotoluene		132SC	Vinyl Chloride	0.2-4 ppm	1	Twin Tubes, Conversion chart
Triethyl Amine	1 ppm (3 ppm)	213S	Triethylamine	1-20 ppm	1/2-1	
		105SD	Ammonia	1-10 ppm	1	Conversion chart
Trimethyl Amine	5 ppm (15 ppm)	222S	Diethyl & Trimethyl Amine	1-20 ppm	1	
		105SD	Ammonia	1-20 ppm	1	
1,2,4-Trimethyl Benzene (Pseudocumene)	25 ppm	111U	Isopropyl & Ethyl Acetate	20-250 ppm	1	Conversion chart
2,2,4-Trimethyl Pentane		113SB	Hexane	100-4000 ppm	1/2-1	Conversion chart
Turpentine (see Mineral Turpentine)						
TWA (Long Duration) Tubes (see separate listing)						
Valerianic Acid		216S	Acetic Acid	3-70 ppm	1	Conversion chart
Vinyl Acetate	10 ppm (15 ppm)	237S	Vinyl Acetate	5-120 ppm	1-2	
Vinyl Benzene (see Styrene)						
Vinyl Chloride (Chloroethylene)	1 ppm	132SA	Vinyl Chloride	0.05-1.0 %v	1	
		132SB	Vinyl Chloride	5-500 ppm	1	Store 40-50° F, Twin tubes
		132SC	Vinyl Chloride	0.1-12.0 ppm	1-4	Twin tubes
Vinyl Cyanide (see Acrylonitrile)						
4-Vinyl-1-Cyclohexene	0.1 ppm	190U	Ethyl & Methyl Cellosolve	0.5-16 ppm	4	Conversion chart
Vinyl Trichloride (see 1,1,2-Trichloroethane)						
Vinylidene Chloride (see 1,1-Dichloroethylene)						
Water Vapor		177SA	Water Vapor	1.7-33.8 mg/l	1	
Water Vapor (Ultra Low)		177U	Water Vapor	0.05-2.0 mg/l	1	
Water Vapor (Pipeline)		177UL	Water Vapor	3-80 lb/MMCF	1	
Water Vapor (Pipeline - Low Range)		177UR	Water Vapor	2-12 lb/MMCF	2	
Xylene (Dimethyl Benzene)	100 ppm (150 ppm)	143SA	Xylene	5-1000 ppm	2	
		143SB	Xylene	5-200 ppm	2	

Ion Detector Tubes

These specialized tubes are designed to detect contaminants in water samples. To use them, both ends are broken off and the tube is immersed in a beaker of sample water. The sample is drawn by capillary action, by rubber bulb, or by syringe per the individual tube instructions. Concentrations are indicated by length of stain.

Gas or Vapor to be measured	Tube No.	Detector Tube to be used	Measuring Range	Sample Time
Chloride Ion	201SA	Chloride Ion	10-2000 ppm	1.5 mins
	201SB	Chloride Ion	3-200 ppm	1.5 mins
Chlorine (free residual)	234SA	Chlorine (free residual)	0.4-5 ppm	3 mins
Cyanide Ion	204S	Cyanide Ion	0.2-5 ppm	2-4 mins
Iron Ion	202	Iron Ion	50-400 ppm	250 secs
Salinity	205SL	Salinity	0.01-0.8 %v	30 secs
Sulfide Ion	200SA	Sulfide Ion	2-1000 ppm	3 mins
	200SB	Sulfide Ion	0.5-10 ppm	2.5 mins

TWA Detector Tubes

The Time-Weighted Average (TWA) tubes are designed to provide a long term sample by using a personal monitoring pump (e.g., GilAir-5, LFS-113) at a low flow rate. Samples up to eight hours are possible, and the results are immediate with a direct reading length-of-stain tube. The TWA tubes eliminate laboratory turnaround time and allow faster implementation of correctable measures to worker exposure problems.

Gas or Vapor to be measured	TLV TWA (STEL/Ceiling)	Tube No.	Detector Tube to be used	Measuring Range	Sample Time
Ammonia	25 ppm (35 ppm)	501-TWA	Ammonia - TWA	5-200 ppm	1-8 hrs
Carbon Monoxide	25 ppm	500-TWA	Carbon Monoxide - TWA	5-400 ppm	0.5-8 hrs
Hydrogen Sulfide	10 ppm (15 ppm)	502-TWA	Hydrogen Sulfide - TWA	1-20 ppm	1-8 hrs
Sulfur Dioxide	2 ppm (5 ppm)	503-TWA	Sulfur Dioxide- TWA	0.5-20 ppm	1-8 hrs
Toluene	50 ppm	504-TWA	Toluene - TWA	20-200 ppm	1-8 hrs

Compressed Breathing Air Detector Tubes

The Compressed Breathing Air (CBA) tubes are designed to provide a quick check of the quality of compressed breathing air by monitoring the parameters specified for Grade D air. The tubes must be used in conjunction with the Compressed Breathing Air (CBA) Test Kit (Part No. 7015406).

Gas or Vapor to be measured	CGA Grade D Standard	Tube No.	Detector Tube to be used	Measuring Range
Carbon Dioxide	1000 ppm	601SP	CO ₂ Compressed Breathing Air Tube	100-3000 ppm
Carbon Monoxide	10 ppm	600SP	CO Compressed Breathing Air Tube	5-100 ppm
Oil Mist	5 mg/M ³	602SP	Oil Mist Compressed Breathing Air Tube	0.3-5 mg/M ³
Oxygen	19.5-23.5 %v	604SP	O ₂ Compressed Breathing Air Tube	2-24 %v
Water Vapor	varies with use	603SPA	H ₂ O Compressed Breathing Air Tube	20-160 mg/M ³

NUMERICAL LISTING

Sensidyne Gas Detector Tube Pump Kit (PN^o 830-0001-01)

No.	Gas (Range)	No.	Gas (Range)	No.	Gas (Range)	No.	Gas (Range)
101S	Acetylene (50-1000 ppm)	120UH	Hydrogen Sulfide (2-20 %v)	155U	Methyl Isobutyl ketone (5-300 ppm)	199U	Methyl Cyclohexanol (5-200 ppm)
102SA	Acetone (0.1-5.0 %v)	120UT	Hydrogen Sulfide (2.5-40 %v)	156S	Hydrogen Fluoride (0.25-30 ppm)	200SA	Sulfide Ion (2-1000 ppm)
102SC	Acetone (0.01-4.0 %v)	121SC	Phosphine (20-700 ppm)	157SA	Methyl Bromide (10-500 ppm)	200SB	Sulfide Ion (0.5-10 ppm)
102SD	Acetone (40-5000 ppm)	121SD	Phosphine (0.25-20 ppm)	157SB	Methyl Bromide (0.4-80 ppm)	201SA	Chloride Ion (10-2000 ppm)
103SA	Sulfur Dioxide (0.1-3.0 %v)	121SH	Phosphine (100-3200 ppm)	158S	Styrene (2.5-300 ppm)	201SB	Chloride Ion (3-200 ppm)
103SB	Sulfur Dioxide (0.02-0.3 %v)	121U	Phosphine & Arsine (0.05-2.0 ppm)	158SB	Styrene (1-100 ppm)	202	Iron Ion (50-400 ppm)
103SC	Sulfur Dioxide (20-300 ppm)	122SA	Ethylene Oxide (0.01-4 %v)	159SC	Oxygen (1.5-24 %v)	203S	Copper Ion (1-100 ppm)
103SD	Sulfur Dioxide (1-60 ppm)	122SB	Ethylene Oxide (5-100 ppm)	160S	Methyl Chloroform (15-400 ppm)	204S	Cyanide Ion (0.2-5 ppm)
103SE	Sulfur Dioxide (0.25-10 ppm)	122SC	Ethylene Oxide (1-15 ppm)	162U	Tetrahydrofuran (20-400 ppm)	205SL	Salinity (0.01-0.8 %v)
103SF	SO ₂ [in flue gas] (0.02-0.3 %v)	122SD	Ethylene Oxide (0.1-14 ppm)	163SA	Propylene Oxide (0.05-5.0 %v)	206U	Cyclohexanol (5-500 ppm)
103SG	SO ₂ [in CO ₂] (0.1-25ppm)	122SM	Ethylene Oxide (5-100 ppm)	164SA	Methyl Mercaptan (5-140 ppm)	208U	Isobutyl Alcohol (5-100 ppm)
104SA	Ethyl Alcohol (0.05-5.0 %v)	123S	Dimethyl Ether (0.01-1.2 %v)	164SH	Methyl Mercaptan (50-2400 ppm)	209U	Isopentyl Alcohol (5-100 ppm)
105SA	Ammonia (0.5-10.0 %v)	124SA	Toluene (10-500 ppm)	165SA	Ethyl Mercaptan (1-160 ppm)	210U	Pentyl Acetate (10-200 ppm)
105SB	Ammonia (50-900 ppm)	124SB	Toluene (2-100 ppm)	165SB	Ethyl Mercaptan [in LP Gas] (2.5-80 ppm)	211U	Ethyl & Butyl & Isobutyl Acrylate (5-60 ppm)
105SC	Ammonia (5-260 ppm)	124SH	Toluene (100-3000 ppm)	166S	Ethylene Dibromide (1-50 ppm)	213S	Triethylamine (1-20 ppm)
105SD	Ammonia (0.2-20 ppm)	125SA	Propane (0.02-0.5 %v)	167S	Hydrogen Selenide (1-600 ppm)	214S	o-Dichlorobenzene (5-100 ppm)
105SH	Ammonia (0.5-30 %v)	126B	Carbon Dioxide (100-7000 ppm)	168SA	Butadiene (0.03-2.6 %v)	215S	p-Dichlorobenzene (10-150 ppm)
105SM	Ammonia (0.1-1.0 %v)	126SA	Carbon Dioxide (0.1-2.6 %v)	168SB	Butadiene (30-600 ppm)	216S	Acetic Acid (1-50 ppm)
106S	Carbon Monoxide (10-250 ppm)	126SB	Carbon Dioxide (0.05-1.0 %v)	168SC	Butadiene (2.5-100 ppm)	219S	Hydrazine (0.05-10 ppm)
106SA	Carbon Monoxide (5-1000 ppm)	126SF	Carbon Dioxide (100-4000 ppm)	168SD	Butadiene (0.5-10 ppm)	221SA	n-Butane (0.05-0.6 %v)
106SC	Carbon Monoxide (1-50 ppm)	126SG	Carbon Dioxide (0.02-1.4%)	169S	Chloroprene (0.5-20 ppm)	222S	Diethyl & Trimethyl Amine (1-20 ppm)
106SH	Carbon Monoxide (0.1-2.0 %v)	126SH	Carbon Dioxide (1.0-20.0 %v)	171SA	Formaldehyde (20-1500 ppm)	223S	2,2-Dichloroethyl Ether (2-30 ppm)
106UH	Carbon Monoxide (0.1-20 %v)	126UH	Carbon Dioxide (5-50 %v)	171SB	Formaldehyde (1-35 ppm)	224SA	Monoethanol Amine (0.5-50 ppm)
107SA	Diethyl Ether (0.04-1.4 %v)	128SA	Acrylonitrile (0.1-3.5 %v)	171SC	Formaldehyde (0.05-4 ppm)	227S	Dimethyl & Ethyl & Methyl Amine (1-20 ppm)
107U	Diethyl Ether (20-400 ppm)	128SB	Acrylonitrile (10-500 ppm)	172S	Chloropicrin (0.05-16 ppm)	229S	N,N-Dimethylacetamide (5-70 ppm)
108B	Ethylene (0.1-100 ppm)	128SD	Acrylonitrile (1-500 ppm)	173SA	Hydrogen Chloride (20-1200 ppm)	230S	1,2-Dichloroethane (5-50 ppm)
108SA	Ethylene (20-1200 ppm)	128SC	Acrylonitrile (1-120 ppm)	173SB	Hydrogen Chloride (0.4-40 ppm)	232SA	Ethylene Glycol (20-250 mg/M ³)
109SA	Chlorine (1-40 ppm)	128SD	Acrylonitrile (0.25-20 ppm)	174A	NO & NO ₂ (NO: 10-300 ppm, NO ₂ : 1-40 ppm)	232SB	Ethylene Glycol (3-40 mg/M ³)
109SB	Chlorine (0.1-10 ppm)	129	Nickel Carbonyl (20-700 ppm)	174B	NO & NO ₂ [flue] (NO: 10-300 ppm, NO ₂ : 1-40 ppm)	233S	Nitric Acid Vapor (1-20 ppm)
109U	Chlorine (0.05-2 ppm)	130U	Mercaptans (0.5-10 ppm)	175SA	Nitrogen Oxides (20-250 ppm)	234SA	Chlorine (free residual) (0.4-5 ppm)
110S	Gasoline (0.05-0.6 %v)	131	Inorganic gases (Qualitative)	175SH	Nitrogen Oxides (100-2500 ppm)	235S	1,1-Dichloroethane (10-160 ppm)
111SA	Ethyl Acetate (0.1-5.0 %v)	132SA	Vinyl Chloride (0.05-1 %v)	175U	Nitrogen Oxides (0.5-30 ppm)	236S	1,1,2-Trichloroethane (10-100 ppm)
111U	Isopropyl & Ethyl Acetate (20-1000 ppm)	132SB	Vinyl Chloride (5-500 ppm)	176S	Methyl Iodide (5-40 ppm)	237S	Vinyl Acetate (5-120 ppm)
112SA	Hydrogen Cyanide (0.01-3.0 %v)	132SC	Vinyl Chloride (0.1-12 ppm)	177SA	Water Vapor (1.7-33.8 mg/l)	238S	Furfuryl Alcohol (2-25 ppm)
112SB	Hydrogen Cyanide (0.5-100 ppm)	133A	Acetaldehyde (0.004-1 %v)	177U	Water Vapor (0.05-2.0 mg/l)	239S	Carbonyl Sulfide (5-60 ppm)
112SC	Hydrogen Cyanide (0.3-8 ppm)	133SB	Acetaldehyde (5-140 ppm)	177UL	Water Vapor (3-80 lb/MMCF)	240S	Silane (0.5-50 ppm)
113SA	n-Hexane (0.05-0.6 %v)	134SA	Trichloroethylene (5-300 ppm)	177UR	Water Vapor (2-12 lb/MMCF)	242S	Diborane (0.02-5 ppm)
113SB	n-Hexane (50-1400 ppm)	134SB	Trichloroethylene (0.2-16 ppm)	178SB	Chlorobenzene (1-140 ppm)	243U	Tetraethoxysilane (5-200 ppm)
113SC	n-Hexane (5-800 ppm)	134SH	Trichloroethylene (0.05-2 %v)	179S	Ethyl Benzene (10-500 ppm)	244U	Sulfuric Acid (0.5-5 mg/M ³)
114	Bromine (1-20 ppm)	135SA	Tetrachloroethylene (5-300 ppm)	180S	Dichloromethane (10-1000 ppm)	247S	Hydrogen Peroxide (0.5-10 ppm)
115S	Cyclohexane (0.01-0.6 %v)	135SB	Tetrachloroethylene (0.2-10 ppm)	181S	Aniline (1-30 ppm)	280S	Acetylene & Ethylene (20-2000 ppm [Acet], 1200-2000 ppm [Ethyl])
116	Chlorine Dioxide (1-20 ppm)	135SH	Tetrachloroethylene (0.05-2 %v)	182SA	Ozone (50-1000 ppm)	281S	Oxygen & CO ₂ (2-10 %v / 1-20 %v)
117SA	Nitrogen Dioxide (20-1000 ppm)	136	Acrolein (0.005-1.8 %v)	182SB	Ozone (2.5-100 ppm)	282S	H ₂ S & Mercaptans (1-30 ppm)
117SB	Nitrogen Dioxide (0.5-30 ppm)	137U	Hydrogen (0.05-0.8 %v)	182U	Ozone (0.025-3.0 ppm)	290Pll	Hydrocarbons [Arson] (Qualitative)
117SC	Nitrogen Dioxide (0.1-1.0 ppm)	138U	Butyl Acetate (10-400 ppm)	183U	Phenol & Cresol (0.5-25 ppm)		
118SB	Benzene, presence HC (5-200 ppm)	139SB	Dioxane (0.05-2.5 %v) & Methyl Ethyl Ketone (0.01-1.4 %v)	184S	Methyl Methacrylate (10-160 ppm)		
117SD	Benzene (1-100 ppm)	140SA	Arsine (5-160 ppm)	185S	Propylene (50-1000 ppm)		
118SD	Benzene (0.1-75 ppm)	141SA	Carbon Disulfide (30-500 ppm)	186	Organic compounds (5-2500 ppm)		
118SE	Benzene (0.2-80 ppm)	141SB	Carbon Disulfide (0.8-50 ppm)	186B	Organic gases (Qualitative)		
119SA	Methyl Alcohol (0.05-6.0 %v)	142S	Mercury Vapor (0.1-10 mg/M ³)	187S	General Hydrocarbons (50-1400 ppm)		
119U	Methyl Alcohol (20-1000 ppm)	143SA	Xylene (5-1000 ppm)	188U	Isoamyl Acetate (10-400 ppm)		
120GR	Hydrogen Sulfide (0.025-0.4 gr/100CF)	143SB	Xylene (5-200 ppm)	189U	2-Butanol (4-300 ppm)		
120GT	Hydrogen Sulfide (0.25-4 gr/100CF)	145S	1,2-Dichloroethylene (5-400 ppm)	190U	Ethyl & Methyl Cellosolve (5-500 ppm)		
120SB	Hydrogen Sulfide (0.75-300 ppm)	146S	Phosgene (0.1-20 ppm)	192S	Epichlorohydrin (5-50 ppm)		
120SC	H ₂ S presence of SO ₂ (0.005-0.16 %v)	147S	Carbon Tetrachloride (0.5-60 ppm)	193S	Methyl Styrene (10-500 ppm)		
120SD	Hydrogen Sulfide (1-60 ppm)	150U	Isopropyl Alcohol (20-1200 ppm)	194S	1,3-Dichloropropane (10-500 ppm)		
120SE	Hydrogen Sulfide (0.5-40 ppm)	151U	Propyl Acetate (20-1000 ppm)	196S	N,N-Dimethyl Formamide (1-30 ppm)		
120SF	Hydrogen Sulfide (25-2000 ppm)	152S	Chloroform (23-500 ppm)	197U	Cyclohexanone (2-100 ppm)		
120SH	Hydrogen Sulfide (0.1-4.0 %v)	153U	Isobutyl Acetate (10-400 ppm)	198U	Methyl Cyclohexane (2-100 ppm)		
120SM	Hydrogen Sulfide (0.05-1.2 %v)						
120U	Hydrogen Sulfide (0.2-6.0 ppm)						

TWA Tubes

500-TWA	Carbon Monoxide [TWA] (5-400 ppm)
501-TWA	Ammonia [TWA] (5-200 ppm)
502-TWA	Hydrogen Sulfide [TWA] (1-20 ppm)
503-TWA	Sulfur Dioxide [TWA] (0.5-20 ppm)
504-TWA	Toluene [TWA] (20-200 ppm)

Compressed Breathing Air (CBA) Tubes

600SP	CO (5-100 ppm)
601SP	CO ₂ (100-3000 ppm)
602SP	Oil Mist (0.3-5 mg/M ³)
603SPA	H ₂ O (20-160 mg/M ³)
604SP	O ₂ (2-24 %v)

SENSIDYNE KITS & ACCESSORIES

Sensidyne Gas Detector Tube Pump Kit (PN° 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° 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° 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° 830-1001-01 5m Hose

PN° 830-1002-01 10m Hose

PN° 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° 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° 7015406 CBA Analysis Kit

Tube Tip Breaker/Cutter

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

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