

Draeger-Tubes<sup>®</sup>  
and accuro<sup>®</sup> Pump

Trusted Technology that's  
ahead of its time

Accurate

Easy to read

Flexible

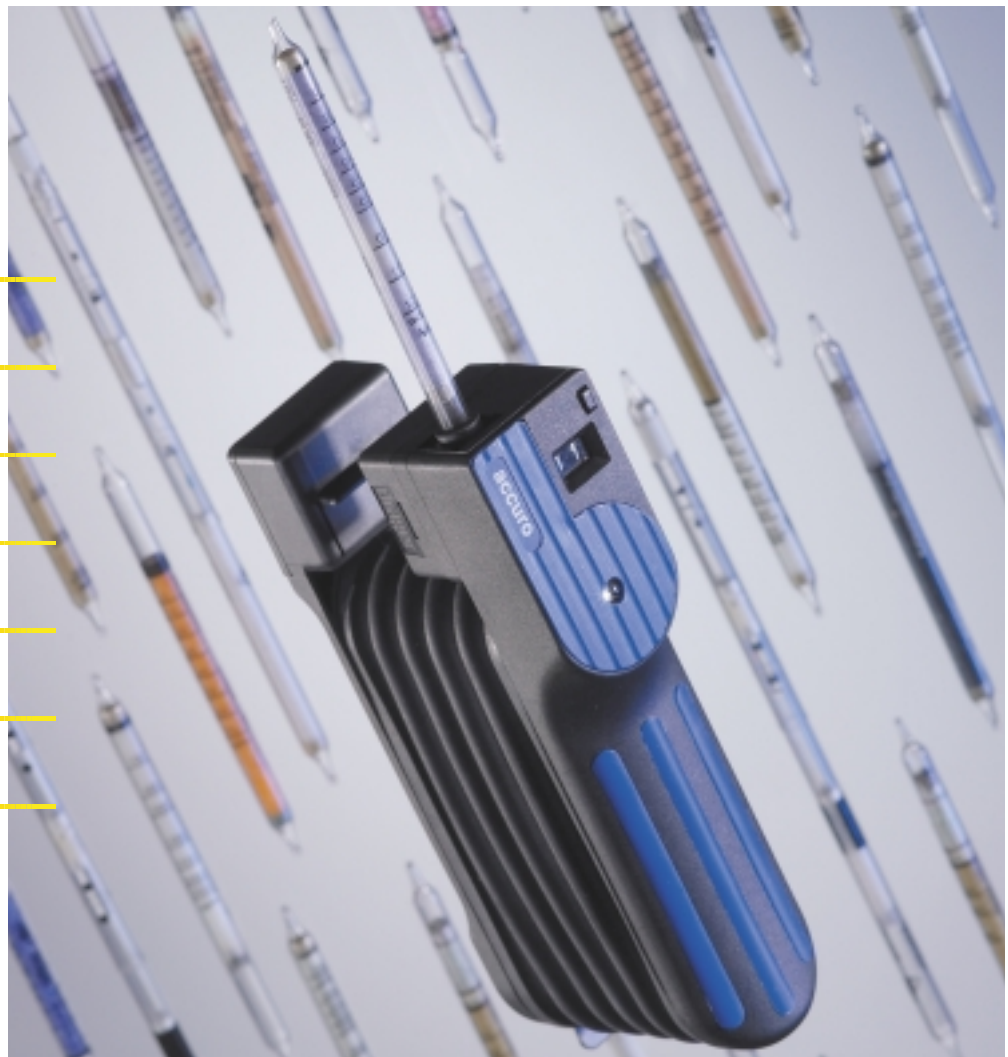
Fast

Specific

Easy to use

Maintenance free

Multi-Gas Detector



accuro<sup>®</sup> pump

One handed operation



## Most Trusted

Draeger-Tubes<sup>®</sup> have been leading the way in gas detection for over 60 years.



## Widest Range

Over 200 different Draeger-Tubes<sup>®</sup> are available for measuring over 500 gases and vapors.



## Hassle-Free Operation

No calibration, no lubrication, no special maintenance. Always ready to go.

### What is the Draeger-Tube<sup>®</sup> System?

Draeger-Tubes<sup>®</sup> are glass vials filled with a chemical reagent that reacts to a specific chemical or family of chemicals. A calibrated 100 ml sample of air is drawn through the tube with the Draeger accuro<sup>®</sup> bellows pump. If the targeted chemical(s) is present the reagent in the tube changes color and the length of the color change typically indicates the measured concentration. The Draeger-Tube<sup>®</sup> System is the world's most popular form of gas detection.

### Draeger: Leading Detection

Ever since 1937 when we introduced our first detector tube, Draeger has been the world leader in the analysis of gases and vapors in the industrial workplace. Over the years we have developed more tubes and detection devices for more applications than anyone else!

Our leading edge technology has kept us on the forefront of colorimetric detector tubes thus providing the most accurate and specific results available.



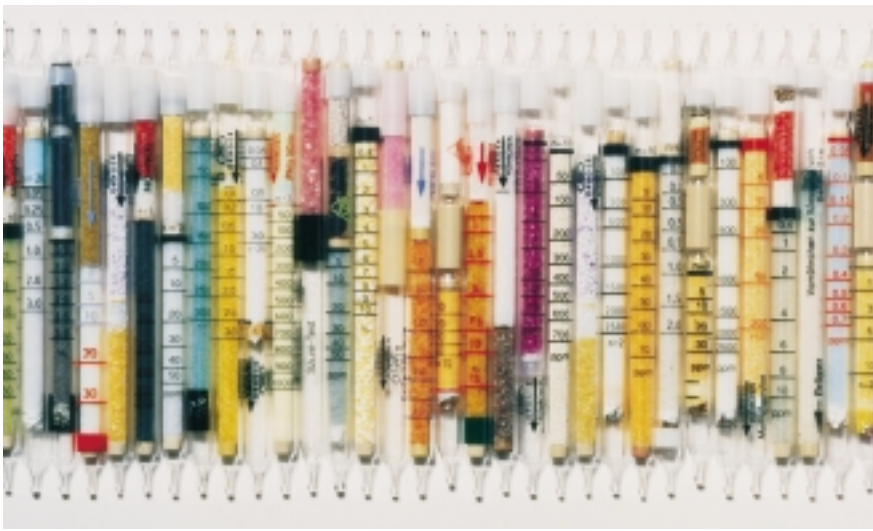
# Draeger Short-term Detection Tubes

Description	Measuring Range	Order Code	Description	Measuring Range	Order Code
Acetaldehyde 100/a	100-1,000 ppm	67 26 665	Chlorine 0.3/b	0.3-10 ppm	67 28 411
Acetic Acid 5/a	5-80 ppm	67 22 101	Chlorine 50/a	50-500 ppm	CH 20701
Acetone 100/b	100-12,000 ppm	CH 22901	Chlorobenzene 5/a (5)	5-200 ppm	67 28 761
Acid Test	Qualitative	81 01 121	Chloroform 2/a (5)	2-10 ppm	67 28 861
Acrylonitrile 0.5/a (5)	0.5-20 ppm	67 28 591	Chloroformates 0.2/b	0.2-10 ppm	67 18 601
Air Current Tube Kit		4054388S	Chloroprene 5/a	5-60 ppm	67 18 901
Air Current Tubes		CH 25301	Chromic Acid 0.1/a (9)	0.1-0.5 mg/m <sup>3</sup>	67 28 681
Alcohol 25/a	50-4,000 ppm Isopropanol 25-5,000 ppm Methanol	81 01 631	Cyanide 2/a	2-15 mg/m <sup>3</sup>	67 28 791
Alcohol 100/a	100-3,000 ppm	CH 29701	Cyanogen Chloride 0.25/a	0.25-5 ppm	CH 19801
Amine Test	Qualitative	81 01 061	Cyclohexane 100/a	100-1,500 ppm	67 25 201
Ammonia 0.25/a	0.25-3 ppm	81 01 711	Cyclohexylamine 2/a	2-30 ppm	67 28 931
Ammonia 2/a	2-30 ppm	67 33 231	Diethyl Ether 100/a	100-4,000 ppm	67 30 501
Ammonia 5/b	2.5-100 ppm	81 01 941	Dimethyl Formamide 10/b	10-40 ppm	67 18 501
Ammonia 5/a	5-700 ppm	CH 20501	Dimethyl Sulfate 0.005/c (9)	0.005-0.05 ppm	67 18 701
Ammonia 0.5%/a	0.05-10 Vol.%	CH 31901	Dimethyl Sulfide 1/a (5)	1-15 ppm	67 28 451
Aniline 0.5/a	0.5-10 ppm	67 33 171	Epichlorohydrin 5/b	5-50 ppm	67 28 111
Aniline 5/a	1-20 ppm	CH 20401	Ethyl Acetate 200/a	200-3,000 ppm	CH 20201
Arsenic Trioxide 0.2/a	0.2 mg/m <sup>3</sup>	67 28 951	Ethyl Benzene 30/a	30-600 ppm	67 28 381
Arsine 0.05/a	0.05-60 ppm	CH 25001	Ethylene 0.1/a (5)	0.2-5 ppm	81 01 331
Benzene 0.5/a	0.5-10 ppm	67 28 561	Ethylene 50/a	50-2,500 ppm	67 28 051
Benzene 0.5/c (5) specific	0.5-10 ppm	81 01 841	Ethylene Glycol 10 (5)	10-180 mg/m <sup>3</sup>	81 01 351
Benzene 2/a (5)	2-60 ppm	81 01 231	Ethylene Oxide 1/a (5)	1-15 ppm	67 28 961
Benzene 5/b	5-50 ppm	67 28 071	Ethylene Oxide 25/a	25-500 ppm	67 28 241
Benzene 15/a	15-420 ppm	81 01 741	Ethyl Glycol Acetate 50/a	50-700 ppm	67 26 801
Carbon Dioxide 100/a	100-3,000 ppm	81 01 811	Fluorine 0.1/a	0.1-2 ppm	81 01 491
Carbon Dioxide 0.1%/a	0.1-6 Vol.%	CH 23501	Formaldehyde 0.2/a	0.2-5 ppm	67 33 081
Carbon Dioxide 0.5%/a	0.5-10 Vol.%	CH 31401	Formaldehyde Activation tube (for use only in conjunction with 0.2/a tube)	extend to 0.04 ppm	81 01 141
Carbon Dioxide 1%/a	1-20 Vol.%	CH 25101	Formaldehyde 2/a	2-40 ppm	81 01 751
Carbon Dioxide 5%/A	5-60 Vol.%	CH 20301	Formic Acid 1/a	1-15 ppm	67 22 701
Carbon Disulfide 3/a	3-95 ppm	81 01 891	Halogenated Hydrocarbons 100/a	100-2,800 ppm	81 01 601
Carbon Disulfide 30/a	32-3,200 ppm	CH 23201	Hexane 100/a	50-3,000 ppm	67 28 391
Carbon Monoxide 2/a	2-300 ppm	67 33 051	Hydrazine 0.2/a	0.2-10 ppm	67 33 121
<b>Carbon Monoxide 5/c</b>	<b>5-700 ppm</b>	<b>CH 25601</b>	Hydrazine 0.25/a	0.1-10 ppm	CH 31801
Carbon Monoxide 8/a (only for CO in H <sub>2</sub> )	8-150 ppm	CH 19701	Hydrocarbons 0.1%/b	0.1-1.3 Vol. %	CH 26101
Carbon Monoxide 10/b	10-3,000 ppm	CH 20601	Hydrocarbons 2	3-23 mg/l	CH 25401
Carbon Monoxide 0.3%/b	0.3-7 Vol.%	CH 29901	Hydrochloric Acid 1/a	1-10 ppm	CH 29501
Carbon Monoxide 200/a + Carbon Dioxide 2%/a	200-2,500 ppm CO 2-12 Vol. % CO <sub>2</sub>	67 18 301	Hydrochloric Acid 50/a	50-5,000 ppm	67 28 181
Carbon Pretubes		CH 24101	Hydrochloric Acid/Nitric Acid 1/a	1-10 ppm (HCL) 1-15 ppm (HNO <sub>3</sub> )	81 01 681
Carbon Tetrachloride 0.2/b	0.2-70 ppm	81 01 791	<b>Hydrocyanic Acid 2/a</b>	<b>2-150 ppm</b>	<b>CH 25701</b>
Carbon Tetrachloride 1/a (5)	1-15 ppm	81 01 021	Hydrogen 0.2%/a	0.2-2 Vol. %	81 01 511
Carbon Tetrachloride 5/c	5-50 ppm	CH 27401	Hydrogen Fluoride 0.5/a	0.5-90 ppm	81 03 251
Chlorine 0.2/a	0.2-30 ppm	CH 24301	Hydrogen Peroxide 0.1/a	0.1-3 ppm	81 01 041

Number in parenthesis indicates tests per box. Consult the VOICE® software or local Draeger representative for Extension of Range for tubes.  
 Bold/Italic font indicates SEI Certification

Description	Measuring Range	Order Code	Description	Measuring Range	Order Code
Hydrogen Sulfide 0.2/a	0.2-5 ppm	81 01 461	Perchloroethylene 10/b	10-500 ppm	CH 30701
Hydrogen Sulfide 0.2/b	0.2-6 ppm	81 01 991	Perchloroethylene 50/A	50-10,000 ppm	81 01 851
Hydrogen Sulfide 0.5/a	0.5-15 ppm	67 28 041	Petroleum Hydrocarbons 10/a	10-300 ppm (n-Octane)	81 01 691
Hydrogen Sulfide 1/d	1-200 ppm	81 01 831	Petroleum Hydrocarbons 100/a	100-2,500 ppm (n-Octane)	67 30 201
Hydrogen Sulfide 2/a	2-200 ppm	67 28 821	Phenol 1/b	1-20 ppm	81 01 641
Hydrogen Sulfide 2/b	1-60 ppm	81 01 961	Phosgene 0.02/a	0.02-1 ppm	81 01 521
Hydrogen Sulfide 5/b	5-600 ppm	CH 29801	Phosgene 0.25/c	0.25-15 ppm	CH 28301
Hydrogen Sulfide 100/a	100-2,000 ppm	CH 29101	Phosphine 0.01/a	0.01-1 ppm	8101 611
Hydrogen Sulfide 0.2%/A	0.2-7 Vol.%	CH 28101	Phosphine 0.1/a	0.1-4 ppm	CH 31101
Hydrogen Sulfide 2%/a	2-40 Vol.%	81 01 211	Phosphine 1/a	1-100 ppm	81 01 801
Hydrogen Sulfide + Sulfur Dioxide 0.2%/A	0.02-7 Vol.%	CH 28201	Phosphine 25/a	25-10,000 ppm	81 01 621
Mercaptan 0.1/a	0.1-2.5 ppm	81 03 281	Phosphine 50/a	15-1,000 ppm	CH 21201
Mercaptan 0.5/a	0.5-5 ppm	67 28 981	Phosphoric Acid Esters 0.05/a	0.05 ppm (Dimethyldichlorovinylphosphate)	67 28 461
Mercaptan 20/a	20-100 ppm	81 01 871	Polytest	Qualitative	CH 28401
Mercury Vapor 0.1/b	0.05-2 mg/m3	CH 23101	Pyridine 5/A	5 ppm	67 28 651
Methyl Acrylate 5/a	5-200 ppm	67 28 161	Styrene 10/a	10-200 ppm	67 23 301
Methyl Bromide 0.5/a	0.5-30 ppm	81 01 671	Styrene 10/b	10-250 ppm	67 33 141
Methyl Bromide 3/a	3-100 ppm	67 28 211	Styrene 50/a	50-400 ppm	CH 27601
Methyl Bromide 5/b	5-50 ppm	CH 27301	Sulfur Dioxide 0.1/a	0.1-3 ppm	67 27 101
Methylene Chloride 100/a	100-2,000 ppm	67 24 601	Sulfur Dioxide 0.5/a	0.5-25 ppm	67 28 491
Natural Gas Test (Methane)(5)	Qualitative	CH 20001	Sulfur Dioxide 1/a	1-25 ppm	CH 31701
Nickel Tetracarbonyl 0.1/a (9)	0.1-1 ppm	CH 19501	Sulfur Dioxide 20/a	20-2,000 ppm	CH 24201
Nitric Acid 1/a	1-50 ppm	67 28 311	Sulfur Dioxide 50/b	50-8,000 ppm	81 01 531
<b><i>Nitrogen Dioxide 0.5/c</i></b>	<b><i>0.5-25 ppm</i></b>	<b><i>CH 30001</i></b>	Sulfuric Acid 1/a (9)	1-5 mg/m3	67 28 781
Nitrogen Dioxide 2/c	2-100 ppm	67 19 101	Tetrahydrothiophene 1/b (5)	1-10 ppm	8101 341
Nitroglycol 0.25/a	0.25 ppm	67 18 201	Thioether	1 mg/m3	CH 25803
Nitrous Fumes 0.5/a	0.5-10 ppm	CH 29401	Toluene 5/b	5-300 ppm	81 01 661
Nitrous Fumes 2/a	2-100 ppm	CH 31001	Toluene 50a	50-400 ppm	81 01 701
Nitrous Fumes 20/a	20-500 ppm	67 24 001	Toluene 100/a	100-1,800 ppm	81 01 731
Nitrous Fumes 50/a	50-2,000 ppm	81 01 921	Toluene Diisocyanate 0.02/A (9)	0.02-0.2 ppm	67 24 501
Nitrous Fumes 100/c	100-5,000 ppm	CH 27701	o-Toluidine 1/a	1-30 ppm	67 28 991
Oil Mist 1/a	1-10 mg/m3	67 33 031	Trichloroethane 50/d (5)	50-600 ppm	CH 21101
Olefins 0.05%/a	0.06-3.2 Vol.% Propylene 0.04-2.4 Vol.% Butylene	CH 31201	Trichloroethylene 2/a	2-250 ppm	67 28 541
Organic Arsenic Compounds and Arsine	3 mg org. arsenic/m3	CH 26303	Trichloroethylene 10/a	50-2,000 ppm	CH 24401
Organic Basic Nitrogen Compounds	1 mg/m3	CH 25903	Triethylamine 5/a	5-60 ppm	67 18 401
Oxygen 5%/C	5-23 Vol.%	81 03 261	Vinyl Chloride 0.5/b	0.5-30 ppm	81 01 721
Ozone 0.05/b	0.05-1.4 ppm	67 33 181	Vinyl Chloride 1/a	1-50 ppm	67 28 031
Ozone 10/a	10-300 ppm	CH 21001	Vinyl Chloride 100/a	100-3,000 ppm	CH 19601
Pentane 100/a	100-1,500 ppm	67 24 701	Water Vapor 0.1/a	0.05-1 mg/L	81 01 321
Perchloroethylene 0.1/a	0.1-4 ppm	81 01 551	Water Vapor 1/a	0.5-18 mg/L	81 01 081
Perchloroethylene 2/a	2-300 ppm	81 01 501	Water Vapor 1/b	1-40 mg/L	81 01 781
			Water Vapor 3/a	3-60 lbs/mmcf	81 03 031
			Water Vapor 50/a	50-1,000 lbs/mmcf	81 03 021
			Xylene 10/a	10-400 ppm	67 33 161

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### Accurate

Not all detector tubes are created equal! Draeger-Tubes® with the accuro pump deliver the most accurate results. Many Draeger tubes offer a +/- 10% standard deviation on the results. This is a result of our 60+ years of manufacturing colorimetric tubes and the consistent volume delivered by the bellows pump design. Quality assurance is accomplished by individually calibrating each batch of Draeger-Tubes®. Then every batch is tested at regular intervals, throughout the two year shelf life, to guarantee accuracy over the entire life of the tubes.

### Easy to Read

See the difference for yourself! The wider diameter of the Draeger-Tubes® makes it easier to read. Well-spaced graduation marks enable distinct and decisive measurement results. Color changes to the reagents are well defined over the entire length of the stain. Many Tubes offer a dual calibrated scale so that you can interpret the results without using multiplication factors.

### Fast

One stroke tubes are not always faster! Though many Draeger-Tubes® require more than one stroke, they often provide measurement results in less time. Not only do you get the benefit of a quicker analysis; the larger sample volume provides better statistical accuracy.

### Flexible

Draeger-Tubes® simply deliver more! More gases and more measuring ranges than any other manufacturer. Draeger offers over 200 tubes for accurately measuring over 500 different gases. You can measure ambient air for health and safety levels, optional equipment allows you to measure stack gases, motor vehicle exhaust components, pressurized gas line samples, compressed air contaminants, and solvents in water samples. Other specialized tubes measure over a period of hours or a complete work shift to indicate daily exposure levels.

### Specific

Reagents used in Draeger-Tubes® are chosen to provide not only the most accurate, but also the most specific results possible. Our use of prelayers on many tubes (like benzene) remove other potential interfering gases (e.g. aromatic hydrocarbons) so you measure only the targeted chemical, getting only the results you want. This design enables you to measure specific gases in a complex ambient background found in the measurement area.

### Draeger-Tubes on Time

We can deliver to most locations in continental North America within 24 hours.





Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.