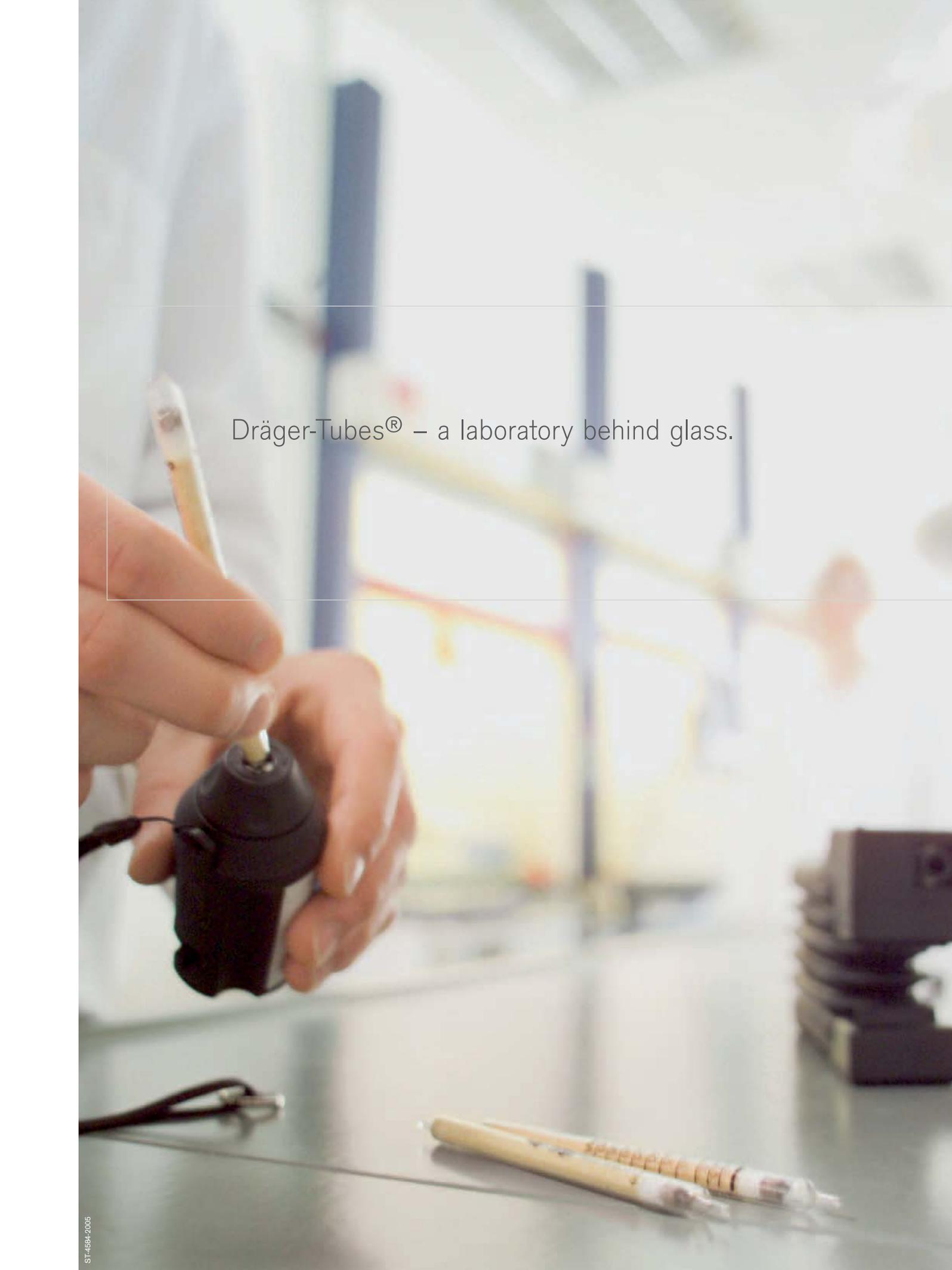




A LABORATORY BEHIND GLASS.
DRÄGER-TUBES®.

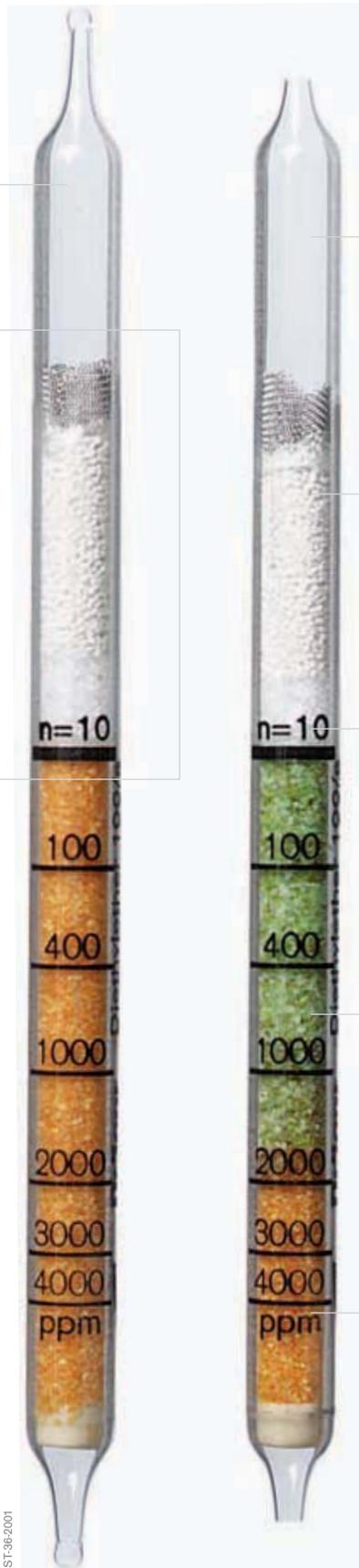
Drägersafety

A person in a white lab coat is using a handheld, dark-colored device to heat a glass tube. The tube is held vertically and has a small amount of liquid inside. The background is a blurred laboratory setting with blue and yellow equipment. The text "Dräger-Tubes® – a laboratory behind glass." is overlaid on the image.

Dräger-Tubes® – a laboratory behind glass.

Dräger-Tube before measurement

Dräger-Tube after measurement:
The air sample causes a clearly visible colour change.



Prelayer

Number of strokes

Indicator layer with scale

Concentration unit

ST-36/2001

The Dräger-Tubes are an extremely cost-effective and, above all, precise method of measurement. Dräger-Tubes have proved themselves a million times over and are used throughout the world.

Dräger-Tubes® – a success story.



DRÄGER-TUBES ARE THE BEST EXAMPLE FOR A SHORT-TERM GAS MEASUREMENT SYSTEM – AND NOT WITHOUT GOOD REASON. FOR OVER SIX DECADES, DRÄGER, THE LEADING TUBE MANUFACTURER, HAS PERFECTED ITS "LABORATORY BEHIND GLASS"; AND THE MORE THAN 100 MILLION TUBES SOLD IN THE LAST 10 YEARS ARE TESTIMONY TO THE SATISFACTION OF OUR CUSTOMERS.

Today, test tubes represent one of the classic forms of gas analysis. These versatile tubes make possible countless applications in industry, firefighting, disaster prevention, laboratory work, environmental protection and many other areas which require measurement results to be instantly available so that decisions can be made.

Especially in applications in which individual measurements or low measurement frequencies are sufficient, Dräger-Tubes have advantages compared to electronic measurement equipment. They are comparatively inexpensive to purchase and very easy to use.

Dräger-Tubes provide exact results immediately after measurement, so there is no

need to send samples into a lab for analysis. There is also no need for calibration by the user – the calibration is shown in the form of a scale printed on the tube.

Currently, more than 220 short-term tubes are available for measuring up to 500 gases, and the number is growing year by year. New and more sensitive tubes are developed to meet changed environmental conditions, new legal regulations, falling limit values and special customer requirements. As far as new gases are concerned, the measurement system plays a pioneering role, and Dräger Safety is a trend-setter when it comes to developing new – even customer-specific – tubes.

The functional principle is amazingly simple

The Dräger tube, a sealed glass vial, contains on a solid carrier material a chemical reagent which reacts to a particular gas or vapour with a characteristic colour change. To cause this reaction, a defined volume of ambient air is drawn through the tube using a gas detector pump. Even small quantities of gas are sufficient, and the user can easily read and analyse the result because of the scale marks printed on the tube.



A bestseller with good reason

Dräger-Tubes

- always deliver a fast and accurate measurement result
- are easy to use, even with safety gloves
- are ideal for spot measurements
- perform their measurements without any power supply
- require no calibration prior to measurement
- offer an impressive level of cost-effectiveness

Dräger Voice: for more detailed information

You can find everything you ever wanted to know about hazardous substances at

www.draeger-safety.com/voice

Our Dräger Voice database contains information about more than 1,600 hazardous substances. In addition, Dräger Safety products that are suitable for measuring and protecting against specific hazardous substances are recommended. Once you have registered – which is quick and free of charge – you can take advantage of this online service at any time, day or night.

Knowledge in compact form

The Dräger-Tubes/CMS handbook is designed to keep you up-to-date with the latest technology and information. It provides a complete overview of all available tubes and systems, their respective applications, and accessories.

Take advantage of our know-how. The range of services we offer – technical applications-related advice, seminars, measurements and analysis, and production of customer-specific tubes – goes far beyond a mere product portfolio.



Our gas detector pumps: making measurements a breeze.

TOGETHER WITH THE DRÄGER SHORT-TERM TUBES, THESE PUMPS MAKE THE PERFECT TEAM. WHETHER YOU CHOOSE A MANUAL ONE-HAND PUMP FOR SINGLE MEASUREMENTS OR AN AUTOMATIC PUMP – WHAT SETS DRÄGER GAS DETECTOR PUMPS APART IS THE FACT THAT THEY ARE ROBUST, HIGHLY ACCURATE, VERY LOW-MAINTENANCE, READY FOR USE QUICKLY AND EASY TO HANDLE.

Dräger accuro gas detector pump

Handy, reliable, tried and tested a million times over: the Dräger accuro. Because this one-hand gas detector pump works without a power supply, it can be used absolutely anywhere in potentially explosive areas.* A sturdy and robust pump, the accuro can be easily operated using only one hand and is therefore suitable for conducting measurements at places which are difficult to access. The end of each stroke is clearly indicated.

Dräger accuro 2000 automatic pump: never short of air

An automatic pump is the obvious choice when you wish to perform very frequent measurements or a high volume of air needs to be drawn through the tube. This pump reliably achieves the necessary num-

ber of strokes, saving effort and time. Even in stressful situations, the Dräger accuro 2000 guarantees that the correct number of strokes (up to 199) will be achieved, and that the strokes will be even.

The Dräger accuro 2000 is ready for operation in no time at all: just insert the manual Dräger accuro gas detector pump, open and then insert the Dräger tube, and programme the required number of strokes. An end-of-stroke indicator and a clearly readable LC display support the controlled pump process.

The reaction systems inside the Dräger-Tubes are designed to work perfectly with the suction characteristics of the Dräger gas detector pumps. To rule out any measurement errors, pumps from other manufacturers should not be used.

ST-440-2005



Dräger accuro:
Handy, reliable and tried and tested a million times over.

1-271-91



Dräger accuro 2000:
Achieves the correct number of strokes automatically.

* Except in conjunction with the following Dräger-Tubes: Halogenated Hydrocarbons 100/a, Oxygen 5%/B, Oxygen 5%/C, Carbon Disulphide 5/a, Sulphuryl Fluoride Tests, Sulphuryl Fluoride 1/a, Hydrogen 0.2%/a, Hydrogen 0.5%/a.



Prepared for every eventuality with the right accessories.

INTELLIGENT ACCESSORIES ENSURE THAT YOU CAN PERFORM RELIABLE MEASUREMENTS, EVEN UNDER EXTREME CONDITIONS. WITH OUR PROVEN SOLUTIONS, YOU COULD NOT BE BETTER PREPARED FOR ANY APPLICATION.

A perfect fit: the extension hose

The extension hose (up to 15 metres in length) for the Dräger accuro, Dräger accuro 2000 and Dräger Quantimeter 1000, fitted with a tube holder at the free end of the hose, allows measurements to be performed at hard-to-access sites like ducts, shafts and tanks. This means that measurements are possible without dead-space volume and laborious flushing processes. The hose comes with its own adapter, meaning that it can be connected directly to the Dräger gas detector pumps.

No temperature too high: the hot-air probe

The hot-air probe allows you to measure even extremely hot gases, e.g. in combustion plants. This probe needs to be used whenever the temperature range indicated in the instructions for use is exceeded. The probe, which is connected by a rubber hose to the tube, cools the gas to temperatures below 50 °C.

Cutting edge: the Dräger TO 7000

No bigger than a pencil sharpener, the Dräger TO 7000 opens the glass tip so cleanly that no jagged edges remain on the tube. Simply insert the tube, twist it, and you are ready for measurement. With the white measurement scale printed on the Dräger TO 7000, you always have a light background for easy readability.

Warmth without power: the Hot-Pack Holder

Freezing temperatures down to -20 °C are no problem for the first "tube warmer", which requires no electrical power supply. The Dräger Hot-Pack Holder allows Dräger-Tubes to be used even at temperatures below the limits stated in the instructions for use, thus achieving the usual measurement accuracy. Extremely cost-effective (the tube warmers can be used several hundred times) and easy to use, the Dräger Hot-Pack Holder is the ideal companion when working at below-zero temperatures.



Dräger TO 7000:
For safe and easy opening of your Dräger-Tubes.



Hot-Pack Holder for Dräger-Tubes®:
For measurements even at below-zero temperatures.



We've done the packing for you:
complete Aerotest systems and Simultaneous Test.

DRÄGER SAFETY HAS DEVELOPED A RANGE OF MEASUREMENT SYSTEMS TO MEET THE REQUIREMENTS OF YOUR DIFFERENT APPLICATIONS, AND HAS PUT THEM TOGETHER AS COMPLETE SETS. THE DRÄGER TUBE KITS DELIVER FAST AND EFFICIENT RESULTS.



Dräger Aerotest systems

Checking air quality with Dräger Aerotest systems

Every day, fire brigade, healthcare and diving professionals rely on compressed air analysis from Dräger Safety. With more than 100 years of experience in this area, we guarantee measurement technology at the highest level. Our Dräger Aerotest family ensures maximum safety during the measurement of compressed gases.

The Dräger Aerotest system is used to check the quality of the air we breathe. Before compressed air can be used as breathing air, it must meet rigorous quality requirements such as those contained in the EN 12 021 standard and the European Pharmacopoeia. Specially calibrated Dräger-Tubes and the Dräger Aerotest can be used to detect typical impurities in compressed breathing air quickly and reliably, e.g. CO, CO₂, humidity and oil.

Besides breathing air, oxygen and carbon dioxide can also be analysed in no time at all for purity or for compliance with specific regulations. The Dräger Aerotest Simultaneous additionally allows parallel measurement of up to seven different contaminants, with results available in just five minutes. The Dräger Aerotest Simultaneous Set is compact in design and can be connected to standard compressors, compressed air lines and cylinders using normal tools.

A wide selection of Aerotest systems is available for checking compressed gases for purity. We have put the sets together for you in a handy case.



Dräger Simultaneous Test sets save valuable time in hazardous situations

Before you can take specific action to protect personnel and property, you need specific information about the hazard. Air contamination, e.g. from hazardous waste sites, fires, chemical or transport accidents, poses particular challenges. Whenever it is important for you to track down every conceivable potential gas hazard as quickly as possible, the Dräger Simultaneous Test sets are multi-gas detectors which provide a fast basis for reliable decision-making – right on-site.

Dräger Simultaneous Test sets comprise five Dräger-Tubes arranged in parallel in a rubber sleeve. Via an adapter, the air to be tested is drawn through all the tubes simultaneously using the gas detector pump. The concentration of gases to be measured can be seen from markings on

the tubes, which range from "non-hazardous" to "extremely hazardous". We have developed three Simultaneous Test sets for specialized applications such as fires or accidents involving hazardous goods transports: the Dräger Simultaneous Test sets I and II for the measurement of inorganic fumes, and set III for the measurement of organic vapours. In addition, there are six other Dräger Simultaneous Test sets available in conjunction with an adapter and the Dräger gas detector pump for all kinds of different applications.

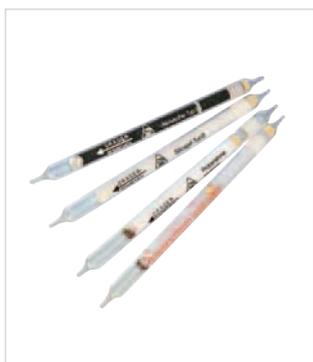
We are happy to advise and assist you with working out specific measurement strategies and putting together individual Simultaneous Test sets to suit your needs.



ST-1362-2004

Dräger Simultaneous Test set:
Parallel measurement of up to five gases.

All Dräger-Tubes® at a glance.



2-9925-91

Dräger-Tubes	Standard Range of Measurement [20 °C, 1013 hPa]	Measurement Time [min.]	Order Code
Acetaldehyde 100/a	100 to 1000 ppm	5	67 26 665
Acetic Acid 5/a	5 to 80 ppm	30 s	67 22 101
Acetone 40/a	40 to 800 ppm	1	81 03 381
Acetone 100/b	100 to 12000 ppm	4	CH22 901
Acid Test	qualitative	3 s	81 01 121
Acrylonitrile 0.5/a (5)	1 to 20 ppm	2	67 28 591
	0.5 to 10 ppm	4	
Acrylonitrile 5/b	5 to 30 ppm	30 s	CH26 901
Activation tube (for use in conjunction with Formaldehyde 0.2/a tube)			81 01 141
Alcohol 25/a		5	81 01 631
Methanol	25 to 5000 ppm		
i-Propanol	50 to 4000 ppm		
n-Butanol	100 to 5000 ppm		
Ethanol	25 to 2000 ppm		
Alcohol 100/a	100 to 3000 ppm	1.5	CH29 701
Amine Test	qualitative	5 s	81 01 061
Ammonia 0.25/a	0.25 to 3 ppm	1	81 01 711
Ammonia 2/a	2 to 30 ppm	1	67 33 231
Ammonia 5/a	5 to 70 ppm	1	CH20 501
	50 to 700 ppm	6 s	
Ammonia 5/b	5 to 100 ppm	10 s	81 01 941
Ammonia 0.5%/a	0.5 to 10 Vol%	20 s	CH31 901
Aniline 0.5/a	0.5 to 10 ppm	4	67 33 171
Aniline 5/a	1 to 20 ppm	3	CH20 401
Arsine 0.05/a	0.05 to 3 ppm	6	CH25 001
Benzene 0.5/a	0.5 to 10 ppm	15	67 28 561
Benzene 0.5/c (5)	0.5 to 10 ppm	20	81 01 841
Benzene 2/a (5)	2 to 60 ppm	8	81 01 231
Benzene 5/a	5 to 40 ppm	3	67 18 801
Benzene 5/b	5 to 50 ppm	8	67 28 071
Benzene 15/a	15 to 420 ppm	4	81 01 741
BTX (Toluene 5/b)	50 to 300 ppm	1	81 01 661
	5 to 80 ppm	5	
Carbon Dioxide 100/a	100 to 3000 ppm	4	81 01 811
Carbon Dioxide 0.1%/a	0.5 to 6 Vol%	30 s	CH23 501
	0.1 to 1.2 Vol%	2.5	

Dräger-Tubes	Standard Range of Measurement [20 °C, 1013 hPa]		Measurement Time [min.]	Order Code
Carbon Dioxide 0.5%/a	0.5 to	10 Vol%	30 s	CH31 401
Carbon Dioxide 1%/a	1 to	20 Vol%	30 s	CH25 101
Carbon Dioxide 5%/A	5 to	60 Vol%	2	CH20 301
Carbon Disulphide 3/a	3 to	95 ppm	2	81 01 891
Carbon Disulphide 5/a	5 to	60 ppm	3	67 28 351
Carbon Disulphide 30/a	0.1 to	10 mg/L	1	CH23 201
Carbon Monoxide 2/a	2 to	60 ppm	4	67 33 051
Carbon Monoxide 5/c	100 to	700 ppm	50 s	CH25 601
	5 to	150 ppm	4	
Carbon Monoxide 8/a	8 to	150 ppm	2	CH19 701
Carbon Monoxide 10/d	100 to	3000 ppm	40 s	81 03 321
	10 to	300 ppm	6	
Carbon Monoxide 10/b	100 to	3000 ppm	20 s	CH20 601
	10 to	300 ppm	3.5	
Carbon Monoxide 10/c	10 to	250 ppm	1.5	81 01 951
Carbon Monoxide 0.3%/b	0.3 to	7 Vol%	30 s	CH29 901
Carbon Tetrachloride 0.2/b	0.2 to	10 ppm	5	81 01 791
	10 to	70 ppm	1	
Carbon Tetrachloride 1/a (5)	1 to	15 ppm	6	81 01 021
Carbon Tetrachloride 5/c	5 to	50 ppm	3	CH27 401
Chlorine 0.2/a	0.2 to	3 ppm	3	CH24 301
Chlorine 0.3/b	0.3 to	5 ppm	8	67 28 411
Chlorine 50/a	50 to	500 ppm	20 s	CH20 701
Chlorobenzene 5/a (5)	5 to	200 ppm	3	67 28 761
Chloroform 2/a (5)	2 to	10 ppm	9	67 28 861
Chloroformates 0.2/b	0.2 to	10 ppm	3	67 18 601
Chloroprene 5/a	5 to	60 ppm	3	67 18 901
Chloropicrine 0.1/a	0.1 to	2 ppm	8	81 03 421
Chromic Acid 0.1/a (9)	0.1 to	0.5 mg/m ³	8	67 28 681
Cyanide 2/a	2 to	15 mg/m ³	2.5	67 28 791
Cyanogen Chloride 0.25/a	0.25 to	5 ppm	5	CH19 801
Cyclohexane 100/a	100 to	1500 ppm	5	67 25 201
Cyclohexylamine 2/a	2 to	30 ppm	4	67 28 931
Diethyl Ether 100/a	100 to	4000 ppm	3	67 30 501
Dimethyl Formamide 10/b	10 to	40 ppm	3	67 18 501
Dimethyl Sulphate 0.005/c (9)	0.005 to	0.05 ppm	50	67 18 701
Dimethyl Sulphide 1/a (5)	1 to	15 ppm	15	67 28 451
Epichlorohydrin 5/b	5 to	50 ppm	8	67 28 111
Ethyl Acetate 200/a	200 to	3000 ppm	5	CH20 201
Ethyl Benzene 30/a	30 to	400 ppm	2	67 28 381
Ethylene 0.1/a (5)	0.2 to	5 ppm	30	81 01 331
Ethylene 50/a	50 to	2500 ppm	4	67 28 051
Ethylene Glycol 10 (5)	10 to	180 mg/m ³	7	81 01 351
Ethylene Oxide 1/a (5)	1 to	15 ppm	8	67 28 961
Ethylene Oxide 25/a	25 to	500 ppm	6	67 28 241
Ethyl Glycol Acetate 50/a	50 to	700 ppm	3	67 26 801
Fluorine 0.1/a	0.1 to	2 ppm	5	81 01 491
Formaldehyde 0.2/a	0.5 to	5 ppm	1.5	67 33 081
Activation tube for use in conjunction with Formaldehyde 0.2/a tube				81 01 141
Formaldehyde 2/a	2 to	40 ppm	30 s	81 01 751
Formic Acid 1/a	1 to	15 ppm	3	67 22 701
Halogenated Hydrocarbons 100/a (8)	100 to	2600 ppm	1	81 01 601

Dräger-Tubes®

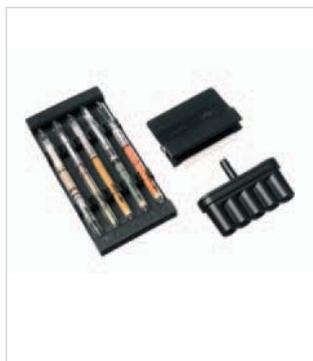
Dräger-Tubes	Standard Range of Measurement [20 °C, 1013 hPa]	Measurement Time [min.]	Order Code
Hexane 100/a	100 to 3000 ppm	3	67 28 391
Hydrazine 0.01/a	0.3 to 5 ppm	5	81 03 351
	0.01 to 0.25 ppm	20	
Hydrazine 0.25/a	0.25 to 10 ppm	1	CH31 801
	0.1 to 5 ppm	2	
Hydrocarbon 2	3 to 23 mg/L	5	CH25 401
Hydrocarbons 0.1%/b	0.1 to 1.3 Vol%	3	CH26 101
Hydrochloric Acid 0.2/a	0.2 to 3 ppm	2	81 03 481
Hydrochloric Acid 1/a	1 to 10 ppm	2	CH29 501
Hydrochloric Acid 50/a	500 to 5000 ppm	30 s	67 28 181
	50 to 500 ppm	4	
Hydrochloric Acid/Nitric Acid 1/a	Hydrochloric Acid 1 to 10 ppm	1.5	81 01 681
	Nitric Acid 1 to 15 ppm	3	
Hydrocyanic Acid 2/a	2 to 30 ppm	1	CH25 701
Hydrogen 0.2%/a	0.2 to 2.0 Vol%	1	81 01 511
Hydrogen 0.5%/a	0.5 to 3.0 Vol%	1	CH30 901
Hydrogen Fluoride 0.5/a	0.5 to 15 ppm	2	81 03 251
	10 to 90 ppm	25 s	
Hydrogen Fluoride 1.5/b	1.5 to 15 ppm	2	CH30 301
Hydrogen Peroxide 0.1/a	0.1 to 3 ppm	3	81 01 041
Hydrogen Sulphide 0.2/a	0.2 to 5 ppm	5	81 01 461
Hydrogen Sulphide 0.2/b	0.2 to 6 ppm	55 s	81 01 991
Hydrogen Sulphide 0.5/a	0.5 to 15 ppm	6	67 28 041
Hydrogen Sulphide 1/c	10 to 200 ppm	20 s	67 19 001
	1 to 20 ppm	3.5	
Hydrogen Sulphide 1/d	10 to 200 ppm	1	81 01 831
	1 to 20 ppm	10	
Hydrogen Sulphide 2/a	20 to 200 ppm	20 s	67 28 821
	2 to 20 ppm	3.5	
Hydrogen Sulphide 2/b	2 to 60 ppm	30 s	81 01 961
Hydrogen Sulphide 5/b	5 to 60 ppm	4	CH29 801
Hydrogen Sulphide 100/a	100 to 2000 ppm	30 s	CH29 101
Hydrogen Sulphide 0.2%/A	0.2 to 7 Vol%	2	CH28 101
Hydrogen Sulphide 2%/a	2 to 40 Vol%	1	81 01 211
Simultaneous Tube Hydrogen Sulphide + Sulphur Dioxide 0.2%/A	0.2 to 7 Vol%	2	CH28 201
Mercaptan 0.1a	0.1 to 2.5 ppm	10	81 03 281
Mercaptan 0.5/a	0.5 to 5 ppm	5	67 28 981
Mercaptan 20/a	20 to 100 ppm	2.5	81 01 871
Mercury Vapour 0.1/b	0.05 to 2 mg/m ³	10	CH23 101
Methyl Acrylate 5/a	5 to 200 ppm	5	67 28 161
Methyl Bromide 0.2/a	0.2 to 8 ppm	8	81 03 391
Methyl Bromide 0.5/a	5 to 30 ppm	2	81 01 671
	0.5 to 5 ppm	5	
Methyl Bromide 3/a (5)	10 to 100 ppm	1	67 28 211
	3 to 35 ppm	3	
Methyl Bromide 5/b	5 to 50 ppm	1	CH27 301
Methylene Chloride 100/a	100 to 2000 ppm	3	67 24 601
Natural Gas Odorization, Tertiary Butylmercaptan	3 to 15 mg/m ³	3	81 03 071
	1 to 10 mg/m ³	5	

Dräger-Tubes	Standard Range of Measurement [20 °C, 1013 hPa]	Measurement Time [min.]	Order Code
Natural Gas Test (5)	qualitative	40 s	CH20 001
Nickel Tetracarbonyl 0.1/a (9)	0.1 to 1 ppm	5	CH19 501
Nitric Acid 1/a	5 to 50 ppm	2	67 28 311
	1 to 15 ppm	4	
Nitrogen Dioxide 0.5/c	5 to 25 ppm	15 s	CH30 001
	0.5 to 10 ppm	40 s	
Nitrogen Dioxide 2/c	5 to 100 ppm	1	67 19 101
	2 to 50 ppm	2	
Nitrous Fumes 0.5/a	0.5 to 10 ppm	40 s	CH29 401
Nitrous Fumes 2/a	5 to 100 ppm	1	CH31 001
	2 to 50 ppm	2	
Nitrous Fumes 20/a	20 to 500 ppm	30 s	67 24 001
Nitrous Fumes 50/a	250 to 2000 ppm	30 s	81 01 921
	50 to 1000 ppm	1	
Nitrous Fumes 100/c	500 to 5000 ppm	1.5	CH27 701
	100 to 1000 ppm	1.5	
Oil 10/a-P	0.1 to 1 mg/m ³	25	67 28 371
Oil Mist 1/a	1 to 10 mg/m ³	25	67 33 031
Olefine 0.05%/a	Propylene 0.06 to 3.2 Vol%	5	CH31 201
	Butylene 0.04 to 2.4 Vol%		
Organic Arsenic Compounds and Arsine	0.3mg/m ³ as AsH ₃	3	CH26 303
Organic Basic Nitrogen Compounds	1mg/m ³ threshold value	1.5	CH25 903
Oxygen 5%/B (8)	5 to 23 Vol%	1	67 28 081
Oxygen 5%/C	5 to 23 Vol%	1	81 03 261
Ozone 0.05/b	0.05 to 0.7 ppm	3	67 33 181
Ozone 10/a	20 to 300 ppm	20 s	CH21 001
Pentane 100/a	100 to 1500 ppm	3	67 24 701
Perchloroethylene 0.1/a	0.5 to 4 ppm	3	81 01 551
	0.1 to 1 ppm	9	
Perchloroethylene 2/a	20 to 300 ppm	30 s	81 01 501
	2 to 40 ppm	3	
Perchloroethylene 10/b	10 to 500 ppm	40 s	CH30 701
Petroleum Hydrocarbons 10/a	10 to 300 ppm	1	81 01 691
Petroleum Hydrocarbons 100/a	100 to 2500 ppm	30 s	67 30 201
Phenol 1/b	1 to 20 ppm	5	81 01 641
Phosgene 0.02/a	0.02 to 1 ppm	6	81 01 521
	0.02 to 0.6 ppm	12	
Phosgene 0.05/a	0.04 to 1.5 ppm	11	CH19 401
Phosgene 0.25/c	0.25 to 5 ppm	1	CH28 301
	0.01 to 0.3 ppm	8	
Phosphine 0.01/a	0.1 to 1 ppm	2.5	81 01 611
Phosphine 0.1/a	0.1 to 4 ppm	6	CH31 101
Phosphine 0.1/b	1 to 15 ppm	20 s	81 03 341
In acetylene	0.1 to 1 ppm	4	
Phosphine 1/a	20 to 100 ppm	2	81 01 801
	1 to 20 ppm	10	
Phosphine 25/a	200 to 10000 ppm	1.5	81 01 621
	25 to 900 ppm	13	
Phosphine 50/a	50 to 1000 ppm	2	CH21 201
Phosphoric Acid Esters 0.05/a	0.05 ppm Dichlorvos	5	67 28 461
Polytest	qualitative	1.5	CH28 401
Pyridine 5/A	5 ppm	20	67 28 651

Dräger-Tubes®

Dräger-Tubes	Standard Range of Measurement [20 °C, 1013 hPa]	Measurement Time [min.]	Order Code
Styrene 10/a	10 to 200 ppm	3	67 23 301
Styrene 10/b	10 to 250 ppm	3	67 33 141
Styrene 50/a	50 to 400 ppm	2	CH27 601
Sulphur Dioxide 0.1/a	0.1 to 3 ppm	20	67 27 101
Sulphur Dioxide 0.5/a	1 to 25 ppm 0.5 to 5 ppm	3 6	67 28 491
Sulphur Dioxide 1/a	1 to 25 ppm	3	CH31 701
Sulphur Dioxide 20/a	20 to 200 ppm	3	CH24 201
Sulphur Dioxide 50/b	400 to 8000 ppm 50 to 500 ppm	15 s 3	81 01 531
Sulphuric Acid 1/a (9)	1 to 5 mg/m ³	100	67 28 781
Sulphuryl Fluoride 1/a	1 to 5 ppm	2	81 03 471
Tertiary Butylmercaptan, Natural Gas Odorization	3 to 15 mg/m ³ 1 to 10 mg/m ³	3 5	81 03 071
Tetrahydrothiophene 1/b (5)	1 to 10 ppm	10	81 01 341
Thioether	1 mg/m ³ threshold value	1.5	CH25 803
Toluene 5/b	50 to 300 ppm 5 to 80 ppm	1 5	81 01 661
Toluene 50/a	50 to 400 ppm	1.5	81 01 701
Toluene 100/a	100 to 1800 ppm	1.5	81 01 731
Toluene Diisocyanate 0.02/A(9)	0.02 to 0.2 ppm	20	67 24 501
Trichloroethane 50/d (5)	50 to 600 ppm	2	CH21 101
Trichloroethylene 2/a	20 to 250 ppm 2 to 50 ppm	1.5 2.5	67 28 541
Trichloroethylene 50/a	50 to 500 ppm	1.5	81 01 881
Trichloroethylene 50/a	50 to 500 ppm	1.5	81 01 881
Triethylamine 5/a	5 to 60 ppm	2	67 18 401
Vinyl Chloride 0.5/b	5 to 30 ppm 0.5 to 5 ppm	30 s 3	81 01 721
Vinyl Chloride 1/a	5 to 50 ppm 1 to 10 ppm	2 8	67 28 031
Vinyl Chloride 100/a	100 to 3000 ppm	4	CH19 601
Water Vapour 0.1	1 to 40 mg/L	2	CH23 401
Water Vapour 0.1/a	0.1 to 1.0 mg/L	1.5	81 01 321
Water Vapour 1/b	20 to 40 mg/L 1 to 15 mg/L	20 s 40 s	81 01 781
Water Vapour 5/a-P	2 to 450 mg/m ³	25	67 28 531
Water Vapour 20/a-P	20 to 100 mg/m ³ 100 to 500 mg/m ³	10 5	81 03 061
Water Vapour 3/a	3 to 60 lbs/MMcf	1.5	81 03 031
Xylene 10/a	10 to 400 ppm	1	67 33 161

Dräger Simultest



ST-1862-2004

Description	Standard Range of Measurement [20 °C, 1013 hPa]	Measurement Time [min.]	Order Code
Dräger Simultest Container Fumigation 1	Fumigants	4	81 03 380
Dräger Simultest Fumigation	Fumigants	3	81 03 410
Dräger Simultest TIC I	Inorganic Fumes	40 s	81 01 735
Dräger Simultest TIC II	Inorganic Fumes	40 s	81 01 736
Dräger Simultest TIC III	Organic Fumes	2	81 01 770
Dräger Simultest TIC Indicator Substances		2	81 03 170
Adapter Dräger Simultest, consisting of cutting holder and adapter			64 00 090
Fit-up aid for 81 03 380			83 18 110

Dräger-Diffusion-Tubes with direct Indication



ST-1950-2004

Holder for Dräger-Diffusion-Tubes (pack of 3)			67 33 014
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Dräger-Tubes	Standard Range of Measurement [20 °C, 1013 hPa]	Standard Range of Meas. for max. Period of Use [20 °C, 1013 hPa]	Order Code
Acetic Acid 10/a-D	10 to 200 ppm	1.3 to 25 ppm	81 01 071
Ammonia 20/a-D	20 to 1500 ppm	2.5 to 200 ppm	81 01 301
Butadiene 10/a-D	10 to 300 ppm	1.3 to 40 ppm	81 01 161
Carbon Dioxide 500/a-D	500 to 20000 ppm	65 to 2500 ppm	81 01 381

Dräger-Diffusion-Tubes with direct indication

Dräger-Tubes	Standard Range of Measurement [20 °C, 1013 hPa]		Measurement Time [min.]		Order Code
Carbon Dioxide 1%/a-D	1	to 30 Vol%	0.13	to 4 Vol%	81 01 051
Carbon Monoxide 50/a-D	50	to 600 ppm	6	to 75 ppm	67 33 191
Ethanol 1000/a-D	1000	to 25000 ppm	125	to 3100 ppm	81 01 151
Hydrochloric Acid 10/a-D	10	to 200 ppm	1.3	to 25 ppm	67 33 111
Hydrocyanic Acid 20/a-D	20	to 200 ppm	2.5	to 25 ppm	67 33 221
Hydrogen Sulphide 10/a-D	10	to 300 ppm	1.3	to 40 ppm	67 33 091
Nitrogen Dioxide 10/a-D	10	to 200 ppm	1.3	to 25 ppm	81 01 111
Sulphur Dioxide 5/a-D	5	to 150 ppm	0.7	to 19 ppm	81 01 091
Toluene 100/a-D	100	to 3000 ppm	13	to 380 ppm	81 01 421
Trichloroethylene 200/a-D	200	to 1000 ppm	25	to 125 ppm	81 01 441

Dräger Gas Detector Pumps and Systems and accessories for short-term measurement



Description	Order Code
Dräger accuro	
Gas Detector Pump Dräger accuro with Tube opener Dräger TO 7000	64 00 000
One hand gas measurement system Dräger accuro:	64 00 260
Gas Detection-set for Dräger accuro, comprising of: Gas Detector Pump Dräger accuro, carrying case, Tube opener Dräger TO 7000 and spare parts set for Dräger accuro	
Soft Gas Detection-Set, consists of Gas Detector Pump Dräger accuro, spare parts set for Dräger accuro, nylon carrying case	83 17 186
MGD Kit (Dräger accuro), consists of: Dräger accuro, spare part set Dräger accuro, carrying case Dräger accuro	83 18 392
Spare parts set Dräger accuro	64 00 220

Dräger accuro 2000



1-271-91

Description	Order Code
Dräger accuro 2000	
Automatic pump Dräger accuro 2000	64 00 200
for automatic operation of the gas detector pump Dräger accuro (incl. battery pack)	
Attention: charger and hand pump are not included!	
Charger 6 V/800 mA	83 16 992
Battery pack Dräger accuro 2000	64 00 202

Dräger Quantimeter



ST-1372-2004

Description	Order Code
Dräger Quantimeter 1000	81 01 000
Automatic, battery-powered, gas detector pump. Complete with: carrying strap, charging adapter, spare parts kit and special key	
Accessories for Dräger Quantimeter 1000	
Leather carrying bag	81 00 200
Spare part - battery pack	81 00 230
Spare parts kit	81 01 005
3 meter extension hose	64 01 147
Charger 6 V/800 mA	83 16 992

Description	Order Code
Charging adapter new for 83 16 992 (for charging Dräger Quantimeter 1000)	83 18 257
Charging adapter old for 68 05 855 (for charging Dräger Quantimeter 1000)	81 00 270
Extension hose Dräger accuro, 1 m	64 00 561
Extension hose Dräger accuro, 3 m	64 00 077
Extension hose Dräger accuro, 10 m	64 00 078
Extension hose Dräger accuro, 15 m	64 00 079
Carrying case	81 00 228
Snap-on clip for carrying case	81 00 229
Carrying Case, Nylon	45 94 631
Gas detection case without contents	64 00 225
Fumigation case without contents	83 17 147
Tube Opener Dräger TO 7000	64 01 200
Hot pack holder, compl. (incl. 2 Hot packs)	83 16 130
Hot packs (2 pcs)	83 16 139
Hot air probe	CH00 213
Bar Probe 400 for examination of fumigants in containers	83 17 188
Vehicle exhaust probe	CH00 214
NIOSH Adapter	67 28 639

Dräger Aerotest



Description	Order Code
Dräger Aerotest Simultan HP, complete	65 25 951
Dräger Aerotest Alpha, complete	65 27 150
Dräger Aerotest Light, complete	65 25 950
Dräger MultiTest med.Int., complete	65 27 320
Dräger SimultanTest CO ₂ , complete	65 26 170

Dräger-Tubes[®] for application with Dräger Aerotest

Description	Standard Range of Measurement	Order Code
Ammonia 2/a	2 to 30 ppm	67 33 231
Carbon dioxide 100/a-P	100 to 3000 ppm	67 28 521
Carbon monoxide 5/a-p	5 to 150 ppm	67 28 511
Hydrogen sulphide 0,2/a	0.2 to 5 ppm	81 01 461
Hydrogen sulphide 1/d	1 to 20 ppm	81 01 831
Nitrous gases 0.5/a	0.5 to 10 ppm	CH29 401
Oil 10/a-P	0.1 to 1 mg/m ³	67 28 371
Oil PN	5 mg/m ³	81 03 111
Oxygen 5%/B	5 to 23 Vol%	67 28 081
Phosphine 0,1/a	0.1 to 4 ppm	CH31 101
Sulphur dioxide 0,5/a	1 to 25 ppm	67 28 491
Sulphur dioxide 1/a	1 to 25 ppm	CH31 701
Water vapor 5/a-P	2 to 450 mg/m ³	67 28 531
Water vapor 20/a-P	20 to 500 mg/m ³	81 03 061

This tubes are for use in some Dräger Aerotest. For further details please read the manuals of the Dräger Aerotest or contact our sales organisation.

SUBSIDIARIES

AUSTRALIA

Draeger Safety Pacific Pty. Ltd.
Axxess Corporate Park
Unit 99, 45 Gilby Road
Mt. Waverley, Vic 3149
Tel +61 3 92 65 50 00
Fax +61 3 92 65 50 95

CANADA

Draeger Canada Ltd.
7555 Danbro Crescent
Mississauga, Ontario L5N 6P9
Tel +1 905 821 8988
Fax +1 905 821 2565

P. R. CHINA

Beijing Fortune Draeger
Safety Equipment Co., Ltd.
Yu An Lu A 22, B Area
Beijing Tianzhu Airport
Industrial Zone
Houshayu Shunyi District
Beijing 101300
Tel +86 10 80 49 80 00
Fax +86 10 80 49 80 05

FRANCE

Dräger Safety France S.A.S.
3c, Route de la Fédération
67025 Strasbourg Cedex
Tel +33 388 40 76 76
Fax +33 388 40 76 67

MEXICO

Draeger Safety S.A. de C.V.
Av. Peñuelas No. 5
Bodega No. 37
Fraccionamiento Industrial
San Pedrito
Querétaro, Qro México
Tel +52 442 246 1113
Fax +52 442 246 1114

NETHERLANDS

Dräger Safety Nederland B.V.
Edisonstraat 53
2700 AH Zoetermeer
Tel +31 79 344 46 66
Fax +31 79 344 47 90

SINGAPORE

Draeger Safety Asia Pte. Ltd.
67 Ayer Rajah Crescent # 06 03
139950 Singapore
Tel +65 68 72 92 88
Fax +65 67 73 20 33

REP. OF SOUTH AFRICA

Dräger South Africa (Pty) Ltd.
P.O.Box 68601
Bryanston 2021
Tel +27 11 465 99 59
Fax +27 11 465 69 53

SPAIN

Draeger Safety Hispania S.A.
Calle Xaudaró 5
28034 Madrid
Tel +34 91 728 34 00
Fax +34 91 729 48 99

UNITED KINGDOM

Draeger Safety UK Ltd.
Ullswater Close
Kitty Brewster Industrial Estate
Blyth, Northumberland NE24 4RG
Tel +44 1670 352 891
Fax +44 1670 356 266

USA

Draeger Safety, Inc.
101 Technology Drive
Pittsburgh, PA 15275
Tel +1 412 787 8383
Fax +1 412 787 2207

Dräger Safety AG & Co. KGaA
Revalstrasse 1
23560 Luebeck, Germany
Tel +49 451 882 0
Fax +49 451 882 2080
www.draeger-safety.com