

# Nextteq<sup>®</sup> Gas Detection System Detector Tube Guide



1<sup>st</sup>  
Edition



NEXTTEQ  
GAS DETECTION  
SYSTEM  
DETECTOR  
TUBE GUIDE  
  
1ST Edition



BETTER  
TECHNOLOGY.

BETTER  
QUALITY.

BETTER  
VALUE.



Nextteq International LLC, an innovative leader in the gas detection industry, provides industrial professionals with products and expert technical support that encompasses detecting and measuring vapors and gases in the workplace serving the Industrial Hygiene, Safety, and Environmental markets worldwide. By utilizing decades of technical experience in design, manufacturing, marketing, distribution and support, Nextteq has a proven reputation of supplying and fully supporting superior products in the field that continuously meet the industry's highest quality standards and technology requirements. Nextteq has over 20 technical patents and patents pending in gas or substance detection technology.

The Nextteq Detector Tube and Pump System offers:


- **better technology** with future expansion in gas and vapor detection,
- **better quality** for reliable, safe use day after day, and
- **better value** in price, high-level support, and product longevity.

The Nextteq Detector Tube and Pump System focuses on ease of use, speed, and accuracy and is manufactured by one of the largest professional industrial organizations in the gas detection industry.

The Nextteq Gas Detector Tube and Pump System reflects the technical and market feedback provided by numerous long-term relationships with customers and leading industrial professionals from around the world. Nextteq continuously sets the bar for product expertise, quality, customer service, and no-charge technical support. Nextteq's in-house staff incorporates a Certified Industrial Hygienist, a Board Certified Toxicologist, and a Certified Safety Professional to assist you with your technical questions.

The Nextteq Gas Detector Tube and Pump System product line represents well over 500 unique applications utilizing over 300 different kinds of detector tubes as part of a complete sampling and analysis system to detect and measure toxic and combustible gases or vapors and materials in support of multiple industries including: Industrial, Manufacturing, Chemical, Energy, Construction, Transportation, Medical, HAZMAT, Uniformed Services and Government Agencies.

Simply put, Nextteq's Gas Detector Tube and Pump System is designed, built and supported by industry professionals for industry professionals.





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VeriAir Flex®  
Sampling Bags



VeriFit® Respirator  
Fit Testing



Personal/Area  
Sampling Pumps



Portable Gas  
Detectors

# Nextteq NX-1000 Gas Sampling Pumps

## Lifetime Warranty

Covers normal wear and tear for the life of your NX-1000 Sampling Pump.

**Rubber Tube Inlet:**  
a rubber flange into which the detector tube is inserted

**Inlet Clamping Nut:**  
holds the rubber inlet in place

**Head Case:**  
removable for aid in maintenance

**Thermal Ring:**  
accurately displays ambient temperature

**Pump Cylinder:**  
made of metal to ensure smooth flow

**Pump Piston:**  
sealing assures excellent air tightness and durability

**Pump Body:**  
pump body is covered with an antibacterial soft elastomer, with the middle portion narrower than the ends to ensure a firm safe grip on the pump cylinder

**Bottom Case:**  
removable for aid in maintenance

**Tube Tip Breaker:**  
built-in tip breaker makes the tip breaking much easier, safer and convenient. Remove cap for easy disposal

**Guide Marks:**  
bright red marks on the handle shaft are aligned with the red guideline on the pump to place the handle at the initial position

**Pump Stop Marks:**  
locks the shaft into the position of  
a. 50 mL half stroke  
or  
b. 100 mL full stroke

**Bottom Red Line:**  
used to identify the pump handle is fully inserted when the red line is no longer visible

**Handle:**  
two-finger design for easy, consistent pull back sampling. Clicking noise ensures complete sample pull of 50 mL or 100 mL

**Flow Finish Indicator:**  
enclosed indicator in front of pump (protects against dust/dirt buildup) confirms the completion of the sampling of 100 mL or 50 mL



**NX-1000 with Automatic Stroke Counter:**  
removeable LED Automatic Stroke Counter: Easily slides off and can be replaced with tube tip cutter



**Tube Tip Cutter:**  
replaces display for intrinsically safe operation



Carrying Case



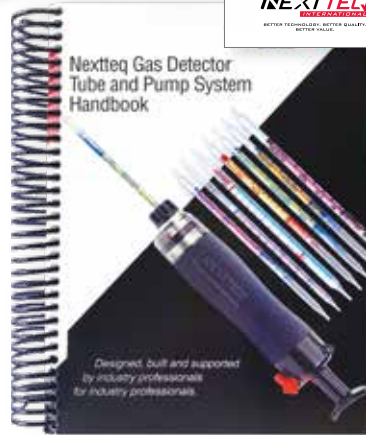
Rubber Tube Inlets  
Lubricant / Grease



**NX-1000**  
Gas Sampling Pump

Hand Strap

Pump Manual



Nextteq Gas Detector Tube System Handbook

# Nextteq NX-1000 Gas Sampling Pump Deluxe Kit

Includes:

- NX-1000 Gas Sampling Pump
- Carrying Case
- Lubricant / Grease
- Rubber Tube Inlets (2)
- Hand Strap
- Manual
- Handbook

	Intrinsically Safe			Not Intrinsically Safe ⚠		
	NX-1000 Pump			NX-1000 Pump with Automatic Stroke Counter		
	NX-1000 Pump Only	NX-1000 Pump Kit	NX-1000 Pump - Deluxe Kit	NX-1000 Pump with Stroke Counter Only	NX-1000 Pump with Stroke Counter Kit	NX-1000 Pump with Stroke Counter Deluxe Kit
	NX-1000-100	NX-1000-130	NX-1000-150	NX-1000-200	NX-1000-230	NX-1000-250
Nextteq Gas Sampling Pump with removable Automatic Stroke Counter/ Tip Cutter				X	X	X
Nextteq Gas Sampling Pump	X	X	X			
Hand Strap	X	X	X	X	X	X
Thermal Ring	X	X	X	X	X	X
1 Lubricant / Grease	X	X	X	X	X	X
2 Rubber Tube Inlets	X	X	X	X	X	X
Manual	X	X	X	X	X	X
Carrying Case		X	X		X	X
Nextteq Handbook			X			X

⚠ Caution: The NX-1000 Sampling Pump with Automatic Stroke Counter is NOT intrinsically safe and is NOT to be used in hazardous areas where there is an explosion potential.

# Nextteq Detector Tubes – Diagram and Features

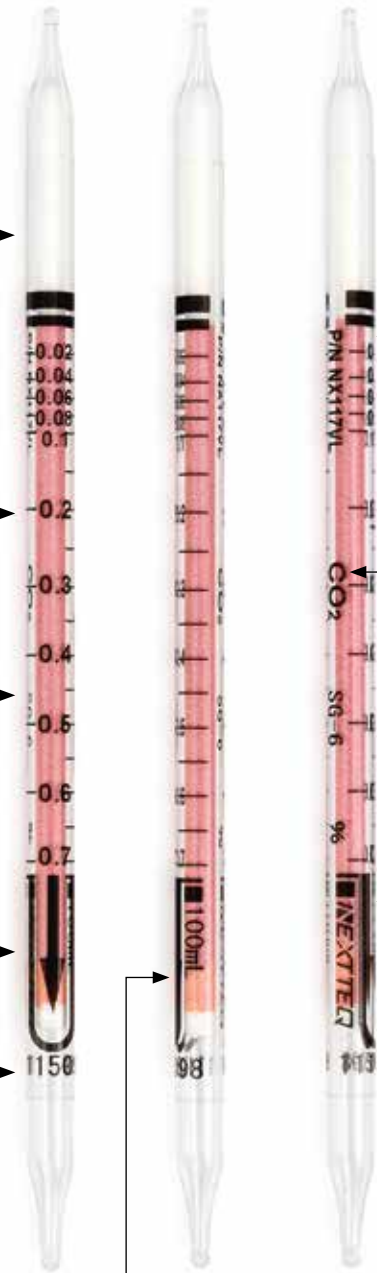
**High quality glass tube –**  
Each detector tube is wrapped in a thin transparent film that protects against the shattering of the glass tube and the release of the chemical reagent in the event of accidental tube breakage.

**Calibration scale –**  
(in ppm, mg/m<sup>3</sup>, mg/l, lb/mmcf or % depending on the substance and its concentration to be measured) - Printed label in contrasting ink color that permits high legibility against the color change layer.

**Reliable detecting reagents**  
that comply with Nextteq's stringent quality standards (regulating the length of color change layer, the clear distinction of the line of demarcation, and the tone and brightness of the color change).

**Arrow –**  
Indicates the direction of the flow of air through the tube when a sample is taken.

**Quality control number (Lot No.) –**  
Nextteq's quality assurance number is printed on every Nextteq detector tube. Detector tubes of the same production lot have the same Lot No. When a Lot No. is registered, sample tubes with that Lot No. will be retained and monitored periodically to verify the quality. Each scale is determined for each production that has passed Nextteq's rigorous qualification testing protocol.



**Detector tube number –**  
A unique part number that defines the substance and range to be detected. See page 12 "How to Read the Nextteq Detector Tube Tables" for complete descriptions of all Nextteq detector tube part numbers.

Example: **NX117VL**  
**NX** – represents the Nextteq brand.  
**117** – a unique Nextteq number that represents the kind of substance the tube can measure (Carbon Dioxide).  
**VL** – unique lettering that represents the concentration the tube can determine (Very Low range).

**Chemical formula**  
of the substance to be measured.

**NEXTTEQ**  
A brand name that indicates the highest quality tube available in the market exclusively sold by Nextteq International LLC.

**Pump stroke volume –**  
"100 mL" indicates that one complete pump stroke is required to collect the standard volume of sample air for this tube. "200 mL" indicates two complete pump strokes of 100 mL per stroke.





# Nextteq Gas Detector Tubes – Reading the Box Label

## Expiration Date of Shelf Life:

Nextteq Detector Tubes have a shelf life of 1-3 years depending upon the application.

**Unique Nextteq Detector Tube Number:**  
See page 12 “How to Read Nextteq Gas Detector Tube Tables” for complete descriptions of all Nextteq detector tube part numbers.

**Scale Range:**  
printed on the tube.

**List of Other Gases or Vapors**  
that can be detected and measured using this tube. This section may be left off if no other applications available.

**Shatterproof Tube:**  
Each Nextteq Detector Tube is wrapped in a thin transparent film that protects against the glass tube shattering and the release of the chemical reagent in the event of accidental tube breakage.

**Storage instructions:**  
There are three different storage conditions for tubes:

- 1) “Store in a cool, dry, and dark place at 32-77°F (0-25°C)” – These tubes do not need to be refrigerated but can be refrigerated.
- 2) “Store in a refrigerated place at 32-50°F (0-10°C)” – These tubes need to be refrigerated.
- 3) “Store in a cool, dry and dark place, NOT REFRIGERATED, at 68-77°F (20-25°C)” – These tubes cannot be refrigerated.

Exp. Date:

W19161XN N/P

**INEXTEQ**  
INTERNATIONAL

BETTER TECHNOLOGY. BETTER QUALITY.  
BETTER VALUE.

---

**WARNING:**  
Use Nextteq Detector Tubes Only with Nextteq NX-1000 Pumps

P/N NX161M  
**n-HEXANE**  
CH3(CH2)4CH3

Scale Range 50-1400 PPM  
Full Range 50-1400 PPM  
10 tubes for 10 tests

**Other substances measurable with this detector tube**

- Heptane
- Isobutane
- Isobutylene
- Methyl Cyclohexane
- Pentane
- 2,2,4-Trimethyl Pentane

Lot No. 301098  
Shatterproof Tubes  
Tested and approved for use with 20 meter extension hose

Store in a cool, dry and dark place  
NOT REFRIGERATED, at 68-77°F (20-25°C)

**NEXTEQ INTERNATIONAL LLC**  
8406 Benjamin Rd. Ste. J,  
Tampa, FL 33634 USA  
Tel: 813-249-5888 • Tel: 877-312-2333  
[www.nextteq.com](http://www.nextteq.com)

**Gas or Vapor to be Detected:**  
Nextteq Detector tubes can detect over 500 gases or vapors.

**Chemical Formula of Gas or Vapor**  
to be detected: now printed on label for ease of use.

**Full Range:**  
full detection range of tube which can exceed the scale range.

**Quantity of Nextteq Detector Tubes**  
inside box and number of tests per box. Ex. 10 tubes for 10 tests, 5 tubes and 5 pre-treat tubes for 5 tests, etc.

**Manufacturing Lot Number**  
of Nextteq Detector Tube – Quality Control number maintained by Nextteq.

**Maximum Length of Nextteq Extension Hose**  
that has been tested and approved to be used with the Nextteq NX-1000 pump and this tube. Nextteq offers an optional 5, 10, and 20 meter extension hose for remote sampling.

**Nextteq Contact Information:**  
Toll free phone number for quality, one on one customer service, and no-charge technical support. Nextteq’s in-house staff incorporates a Certified Industrial Hygienist, a Board Certified Toxicologist, and a Certified Safety Professional to assist you with your technical questions.

# Nextteq Gas Detector Tubes – How to Use and Read Gas Detector Tubes



## STEP ONE

Prior to any sampling, perform a leak test on the gas sampling pump. To begin sampling, break off both ends of the detector tube by using the built-in tip breaker. Confirm the pump handle is fully pushed in. Then insert the detector tube into the rubber inlet with the (→) pointed towards the Nextteq NX-1000 Gas Sampling Pump.

## STEP TWO

Align the red guide marks on the shaft with the red guide mark on the pump body and pull the handle out to the 50 or 100 mL line until it is locked. Wait until the sampling time has elapsed. The sample time required for each Nextteq detector tube is stated clearly in the detector tube's instruction sheet. With an easy-to-see flow finish indicator (red indicator pops up when the prescribed volume has been fully drawn), the operator is assured that the sampling is complete.

## STEP THREE

The color of the reagent in the detector tube changes as the gas is drawn in through the tube. Wait the required sampling time and read the measurement at the end of the colored layer. Immediately document the concentration reading, or mark the color change demarcation on the glass tube with a pen, or take a photo to document the reading.

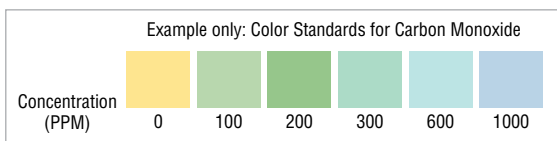
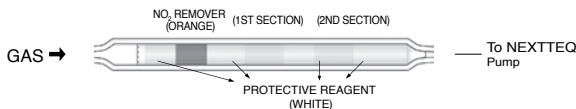
## For Color Chart Tubes:

There are two types of Color Chart Tubes:

1) Tubes that have several sections of specific reagent that will change color to identify the type of gas present. For example, Inorganic (NX301) and Organic (NX302) qualitative detector tubes have a special color chart to identify 60 chemicals in a couple of minutes.

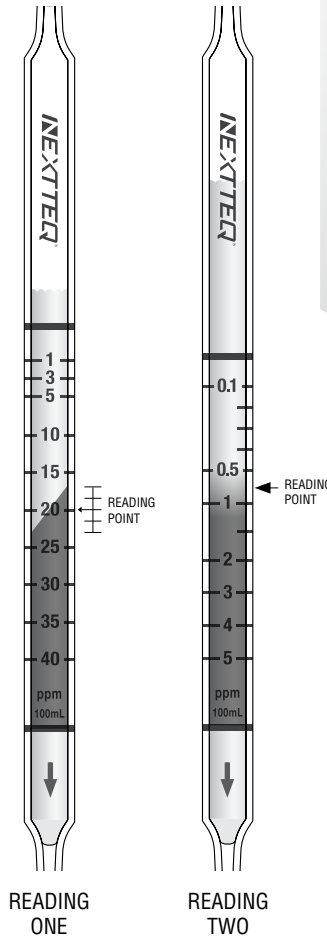


2) Tubes whose reagent sections will show a change in color intensity proportional to the concentration of the target gas which can be measured by comparing the tube's color stain to a color intensity chart. For example, with Carbon Monoxide (NX119SA and NX119SB), the color goes from pale yellow to green to blue depending on the concentration of CO and other gases present.



## NEXTTEQ GAS DETECTOR TUBES ARE OF TWO BASIC TYPES:

- 1) Length of stain detector tubes
  - A) Direct Reading tubes:
    - Single tube and
    - Twin and Triplet tubes that utilize a pre-treat tube(s) or post-treat tube
  - B) Concentration Chart tubes
- 2) Color Chart tubes



## How to read the Gas Concentration from a Gas Detector Tube:

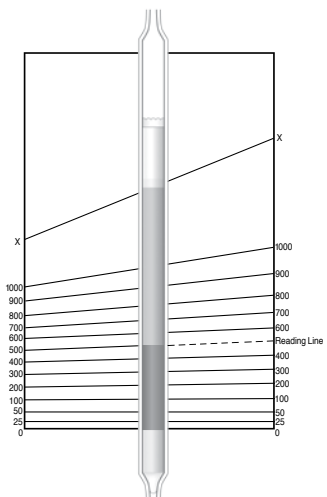
[Direct reading type]  
Read the concentration of gas at the maximum end of the stain against the printed scale on the detector tube.

**READING ONE**  
**In case the end of the stain is slanted:**  
Read out the numerical value at the middle of the oblique layer.

**READING TWO**  
**In case of faint discoloration:**  
Read the concentration of the gas at the maximum end of the stain.

## Concentration Chart Type:

Nextteq Concentration Chart Tubes utilize a printed chart used to determine the concentration of the gas or vapor present. After completing the sample, align the zero end of the detecting reagent (inlet side of the tube) with the 0 – 0 line on the concentration chart. Align the other end of the same layer (exit side or pump side of the tube) with the X – X line respectively. Read the gas concentration at the maximum end of the stain against the scale on the card. If the end is slanted, read at the middle point of the oblique stain.

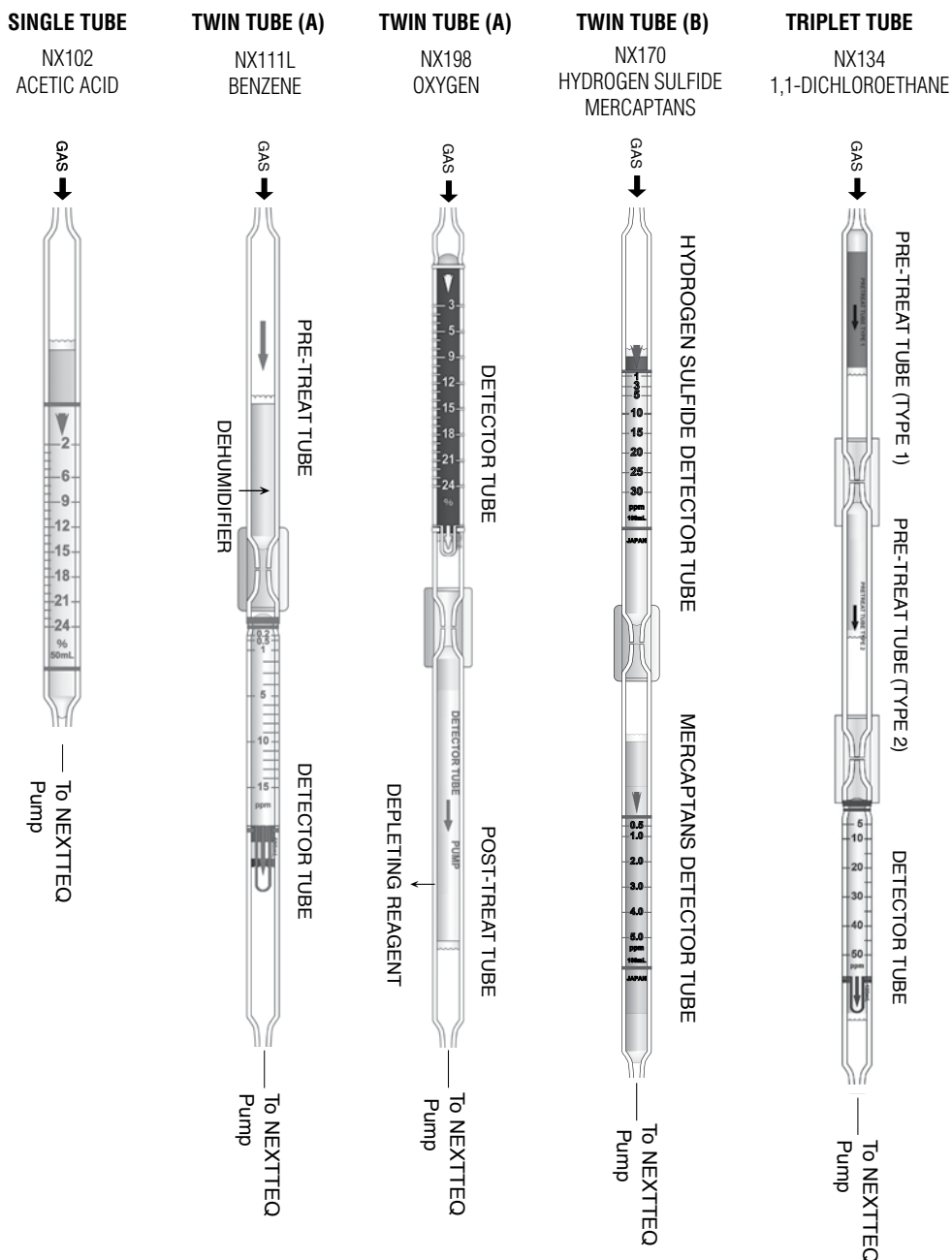


Nextteq Detector Tubes consist of one of the 5 following configurations:

- SINGLE TUBE:** 1 tube for a single measurement
- TWIN TUBE (A):** 2 tubes for a single measurement
  - 2 tubes that connect a pre-treat tube and a measurement tube using a connecting rubber tube
  - 2 tubes that connect a measurement tube and a post-treat tube using a connecting rubber tube
- TWIN TUBE (B):** 2 tubes for a dual measurement
  - 2 tubes that connect 2 measurement tubes using a connecting rubber tube that detects two different chemicals separately
- TRIPLET TUBE:** 3 tubes that connect a measurement tube and two pre-treat tubes with connecting rubber tubes

Examples of each are below:

# Nextteq Gas Detector Tubes – Configurations



## HOW TO READ NEXTTEQ GAS DETECTOR TUBE TABLES

**Gas to be Measured** The concentration of the target gas is read directly off the printed scale or by using a concentration chart included in the tube box.

**Tube No.** Tube numbers are listed in descending order of high concentration.  
\*After tube no. means the concentration is read by using a conversion chart.

Nextteq Letter Designation for Detector Tubes:

“A”, “B”, and “F” = tube type discriminators. (A and B are specialty tubes and F is for flue gas)	“L” = Low range (In general, a single tube is designated with “L” if they can read at or below the TLV )
“S” = Specialty tube	“LM” = Low Mid range
“C” = Concentration Chart tube	“M” = Mid range
“P” = Pipeline tube	“MH” = Mid High range
“UL” = Ultra Low range	“H” = High range
“VVL” = Very Very Low range	“VH” = Very High range
“VL” = Very Low range	“VVH” = Very Very High range
	“UH” = Ultra High range

**Storage** There are three different storage conditions for tubes:  
Most tubes do not need to be refrigerated but can be stored in a refrigerator or in a cool, dry and dark place 77°F (25°C) or less. Alternatively tubes can be stored in a refrigerated place at 32-50°F (0-10°C). There will be no letter designation for these tubes in the “Storage” column listed below.  
The letter **R** indicates that these tubes NEED TO BE REFRIGERATED: Store in a refrigerated place at 32-50°F (0-10°C).  
The letters **NR** indicates these tubes are NOT REFRIGERATED: Store in a cool, dry and dark place at 68-77°F (20-25°C).

**Full Measuring Range** This is the entire measuring range capability of the tube. For NX-1000 Sampling Pump Applications, this may require a different number of pump strokes for the desired detectable range.

**No. of Pump Strokes** In cases where multiple measuring ranges apply, @ mark indicates the scale printed on the tube.

Example: Tube No. NX117VVL Full Measuring Range (ppm) No. of Pump Strokes

200-4000	1/2
100-2000	①

**Flow Rate** The flow rate required for the Nextteq continuous flow air sampling pumps.

**Shelf Life (Year)** The shelf life starts from the date of manufacture. A stamped expiration date is on every box of tubes.  
Note: Some tubes require refrigeration. Please reference the storage section above.

**Qty of Tubes/Box** Most tubes come in a box of 10 tubes to make 10 measurements per box. Boxes indicating 2 x 5 contain 1 pre-treat or post-treat tube per detector tube to make 5 measurements per box (2 tubes per measurement). Boxes indicating 3 x 5 contain 2 pre-treat tubes per detector tube to make 5 measurements per box (3 tubes per measurement).

**Threshold Limit Value** TLV: TLV-TWA. Threshold Limit Values for Chemical Substances in the Work Environment adopted by the ACGIH (American Conference of Governmental Industrial Hygienists, 2019). C: TLV-C (ceiling value). STEL: TLV-STEL (short-term exposure limit (15 minute reference period)). TLV(UK): Workplace Exposure Limits (WELs) listed on guidance Note EH40/2005 (3rd Edition, 2018) from HSE (Health and Safety Executive) in UK.

**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Acetaldehyde CH <sub>3</sub> CHO Concentration chart method	NX101CM	R	0.004 - 1.0%	1	Mfg. synthetic rubber, plastics, various organics, perfume, flavors, fragrances	1	10	Acetone (1400), Acrolein (35), Methyl Ethyl Ketone (900), Methyl Isobutyl Ketone (2900), SO <sub>2</sub> (10)	C25 20 (UK)
Acetaldehyde CH <sub>3</sub> CHO	NX101L	R	5-140	1	Mfg. synthetic rubber, plastics, various organics	2	10	Other aldehydes, Ethanol	—
Acetaldehyde CH <sub>3</sub> CHO	NX101VL		1-30	1		3	10	Formaldehyde, Ethanol, Acetic acid, Acetone, Ammonia	
Acetaldehyde CH <sub>3</sub> CHO	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Acetic Acid CH <sub>3</sub> COOH	NX102		1.25 -125 <u>0.5-50</u>	1/2 ①	Mfg. cellulose, acetate rayon, vinyl acetate, a seasoning	3	10	SO <sub>2</sub> (1/20 × Acetic acid**), NO <sub>2</sub> (10), HCL (2 × Acetic acid**), Cl <sub>2</sub> (5)	10 10 (UK)
Acetic Acid CH <sub>3</sub> COOH	NX301		15	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
Acetic Anhydride (CH <sub>3</sub> CO) <sub>2</sub> O	NX102* *Acetic Acid Tube		1-15	1	Acetylating agent	3	10	SO <sub>2</sub> (1/20 × Acetic acid**), NO <sub>2</sub> (10), HCL (2 × Acetic acid**), Cl <sub>2</sub> (5)	1 0.5 (UK)
Acetone CH <sub>3</sub> COCH <sub>3</sub>	NX103H		1.0 - 5.0% <u>0.1 - 2.0%</u>	1/2 ①	Leakage & fire hazard detection in acetate rayon industry, paints industry & pharmaceutical industry	3	10	Alcohols, Other Ketones, Aromatic hydrocarbons, Esters, Halogenated hydrocarbons (0.5%)	250 500 (UK)
	NX103MH	R	0.01 - 4.0%	1		1	10	Acetaldehyde (30), Acrolein (20) Methyl Ethyl Ketone (150) Methyl Isobutyl Ketone (400)	—
	NX103L		125-5000 <u>50-2000</u> 20-800	1/2 ① 2	Industrial hygiene for both plant and laboratory	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	—
Acetone CH <sub>3</sub> COCH <sub>3</sub>	NX302		600	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Acetylene HC≡CH	NX104		50 - 1000	1	Process control & leakage detection in synthetic ammonia plant, cuprammonium rayon process	3	10	Olefins (10), H <sub>2</sub> S (10), CO (50), NH <sub>3</sub> , Butadiene (25), HCH, Cl <sub>2</sub> , NO <sub>2</sub> , CS <sub>2</sub> , Benzene	—
Acetylene HC≡CH	NX301		10	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
	NX302		1000	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Acetylene Ethylene separation measurement HC≡CH, H <sub>2</sub> C = CH <sub>2</sub>	NX105 +		HC≡CH 20-300 H <sub>2</sub> C = CH <sub>2</sub> 200-2000	1		1	2 x 5	Tube for HC≡CH; CO (10), H <sub>2</sub> (5000), Ethylene (2000) Tube for H <sub>2</sub> C = CH <sub>2</sub> ; CO (1350), Acetylene (370), Propylene (20)	—

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Acrolein (Acryl Aldehyde) CH <sub>2</sub> = CHCHO Concentration chart method	NX106C	R	0.005-1.8%	1	Leakage & fire hazard detection in plastics industry	1	10	Acetylene (20), Acetaldehyde (70), Methyl Ethyl Ketone (60), Methyl Isobutyl Ketone (500)	C 0.1 0.02 (UK)
Acrylic Acid CH <sub>2</sub> = CHCOOH	NX102* *Acetic Acid Tube		1-50	1	Material of acrylic resin	3	10	SO <sub>2</sub> (1/20 Acetic Acid**), NO <sub>2</sub> (10), HCl (2 x Acetic Acid**), Cl <sub>2</sub> (5)	2 10 (UK)
Acrylonitrile (Vinyl Cyanide) CH <sub>2</sub> = CHCN	NX107VH		0.1-3.5%	1	Leakage & fire hazard detection in synthetic rubber & plastics industry	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors except Halogenated hydrocarbons (50)	2 2 (UK)
	NX107H		10-500	1	Leakage detection	2	10		—
	NX107M	R	1-120	2	Industrial hygiene (suspected human carcinogen)	1	2 x 5	Methyl Ethyl Ketone (600), Styrene (250), HCN (2), Butadiene (200)	—
	NX107L	R	1-20 0.5-10 0.25-5 0.2-4	① 2 4 5		1	2 x 5	HCN	—
Allyl Alcohol CH <sub>2</sub> = CHCH <sub>2</sub> OH	NX189* *Methyl Methacrylate Tube		20-500	1	Leakage detection	2	10	Esters, Ketones, Alcohols, Aromatic hydrocarbons, Halogenated hydrocarbons	0.5 2 (UK)
Allyl Chloride CH <sub>2</sub> = CHCH <sub>2</sub> Cl	NX221L* *Vinyl Chloride Tube		1-40	SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS					
Amines	NX301		5	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
Ammonia NH <sub>3</sub>	NX108VVH		0.5-30%	1	Process control & leakage detection in synthetic ammonia plant, cuprammonium rayon process, fertilizer mfg.	3	10	H <sub>2</sub> S (3000)	25 25 (UK)
	NX108VH		0.5-10%	1		3	10	Amines	
	NX108H		0.1-1.0%	1	Process control	2	10	Amines	
	NX108MH		50-900	1		3	10	SO <sub>2</sub> (1/4 x NH <sub>3</sub> **), Cl <sub>2</sub> (2), Amines	
	NX108M		10-260 5-130	① 2	Synthetic ammonia plant, leakage detection of refrigerant in ice plant, industrial hygiene	3	10	SO <sub>2</sub> (1/5 x NH <sub>3</sub> **), Cl <sub>2</sub> (2), Amines	
	NX108L		10-200 5-100 1-20	1/2 ① 5		3	10	Sulfur Dioxide, Chlorine, Amines	
	NX108VL		1-20 0.5-10 0.2-4	① 2 5		3	10	Amines	

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Ammonia NH <sub>3</sub>	NX501H		10-80 µg/m <sup>3</sup>		SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES				
	NX501L		1-12 µg/m <sup>3</sup>		SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES				
	NX601		5-200		SPECIALTY TUBE SEE TABLE 4: NEXTTEQ TIME WEIGHTED AVERAGE DETECTOR TUBES				
Ammonia NH <sub>3</sub>	NX301		5		SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE				
Aniline (Aminobenzene) C <sub>6</sub> H <sub>5</sub> NH <sub>2</sub>	NX109		2-30 1-15	① 2	Industrial hygiene	3	10	Toluidine (1/3 x Aniline**), NH <sub>3</sub> , Aliphatic Amines or Aromatic Amines (the same conc. of Aniline)	2 1 (UK)
Aniline C <sub>6</sub> H <sub>5</sub> NH <sub>2</sub>	NX302		40		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
Arsine AsH <sub>3</sub>	NX110		5-160	1	Doping gas analysis in semiconductor industry, waste gas analysis in metal refinery	2	10	H <sub>2</sub> S (5), Hydrogen Selenide (5), Phosphine (5)	0.005 0.05 (UK)
	NX204L* *Phosphine Tube		0.1-2.0 0.05-1.0	① 2	Industrial hygiene, semiconductor mfg. process	2	10	Hydrogen Selenide, Mercaptans, H <sub>2</sub> S, HCN, SO <sub>2</sub>	
Arsine AsH <sub>3</sub>	NX302		100		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
☆ Benzaldehyde C <sub>6</sub> H <sub>5</sub> CHO	NX151* *Ethyl Cellosolve Tube		5-70		SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS				
Benzene- in the presence of Gasoline and/or other Aromatic hydrocarbons C <sub>6</sub> H <sub>6</sub>	NX111VH		5-300	1	Industrial hygiene (suspected human carcinogen)	2	2 x 5	Toluene (over 150), Hexane (200), Xylene (over 300)	0.5 1 (UK)
	NX111H		1-80 0.2-1	① 5		2	2 x 5	Toluene (1000), Xylene (1000), Ethyl Benzene (1000), CO (2), Hexane (2)	
Benzene C <sub>6</sub> H <sub>6</sub>	NX111M		4-100 2-50 1-25	1 ② 4		2	10	Toluene, Xylene, CO (50), Hexane (100)	
	NX111L		1-75 0.2-15 0.1-7.5	1 ⑤ 10		2	2 x 5	Toluene, Xylene, CO (2.0), Hexane (2.0)	
Benzene C <sub>6</sub> H <sub>6</sub>	NX302		10		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
	NX302		100		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
Benzyl Chloride C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub> Cl	NX221L* *Vinyl Chloride Tube		1-16		SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS				
Bromine Concentration chart method Br <sub>2</sub>	NX112C		1-20	1	Industrial hygiene	2	10	Cl <sub>2</sub> (1), ClO <sub>2</sub> , NO <sub>2</sub>	0.1 0.1 (UK)

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required

☆ The conversion charts and the measuring ranges may vary with each manufacturing lot



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/ box	Interferences (ppm)	USA TLV ppm (UK) WELs
Bromochloromethane CH <sub>2</sub> BrCl	NX180M* *Methyl Bromide Tube	R	2-80 20-400	① 1/2		3	2 x 5		200
Bromoform CHBr <sub>3</sub>	NX180M* *Methyl Bromide Tube	R	1-20 0.5-9	1 2		3	2 x 5		0.5
1-Bromopropane CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> Br	NX180M* *Methyl Bromide Tube	R	5-80	1		3	2 x 5		0.1
1-Bromopropane CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> Br	NX180H* *Methyl Bromide Tube	R	10-500	SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS					
2-Bromopropane (CH <sub>3</sub> ) <sub>2</sub> CHBr	NX180M* *Methyl Bromide Tube	R	5-80	1		3	2 x 5		—
2-Bromopropane (CH <sub>3</sub> ) <sub>2</sub> CHBr	NX180H* *Methyl Bromide Tube		10-500	SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS					
1,3-Butadiene CH <sub>2</sub> =CHCH=CH <sub>2</sub>	NX113VH		0.03-2.6%	1	Process control & fire hazard detection in synthetic rubber industry, mfg. synthetic rubber	3	10	Other organic gases or vapors except Halogenated hydrocarbons (50), Propane (0.2%), Acetylene (3%)	2 10 (UK)
	NX113H		30-600	1	Leakage detection in synthetic rubber industry	3	10	CO, Butane, Pentane, Ethylene, Propylene, Butylene, H <sub>2</sub> S, Benzene, NH <sub>3</sub> , HCN	
	NX113M		5-100 2.5-50	① 2	Leakage detection in synthetic rubber industry	1	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	
	NX113L		0.5-10 0.1-2.0	1 ④	Leakage detection in synthetic rubber industry	3	2 x 5	H <sub>2</sub> S, Isobutylene, NH <sub>3</sub>	
1,3-Butadiene CH <sub>2</sub> =CHCH=CH <sub>2</sub>	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
n-Butane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>2</sub> CH <sub>3</sub>	NX114		0.05-0.6%	1	Combustible gas detection	3	10	Toluene, Hexane, Trichloroethylene	STEL 1000 600 (UK)
n-Butane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>2</sub> CH <sub>3</sub>	NX302		10	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
1-Butanol (n-Butyl Alcohol) CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> OH	NX151* *Ethyl Cellulosolve Tube		5-100	3	Mfg. flotation reagent, stabilizer for solvent, industrial hygiene	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	20
1-Butanol CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> OH	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses  
+ Air Flow Control Orifice is required





**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
2-Butanol (sec-Butyl Alcohol) CH <sub>3</sub> CH <sub>2</sub> CH(OH)CH <sub>3</sub>	NX115		10-300 4-120	② 4	Organic solvent treating, industrial hygiene	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	100 100 (UK)
tert-Butanol (CH <sub>3</sub> ) <sub>3</sub> COH	NX147L* *Ethyl Acetate Tube		20-500	1	Organic solvent treating, industrial hygiene	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	100
Butyl Acetate CH <sub>3</sub> CO <sub>2</sub> C <sub>4</sub> H <sub>9</sub>	NX184M* *Methyl Ethyl Ketone Tube		0.01-1.0%	2	Leakage & fire hazard detection in paints industry & painting, printing inks, artificial leather synthetic dyes, drugs & perfumes	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors except Halogenated hydrocarbons (50)	50 150 (UK)
	NX116		10-400	1	Industrial hygiene	1	10	Other organic gases or vapors	
Butyl Acetate CH <sub>3</sub> CO <sub>2</sub> C <sub>4</sub> H <sub>9</sub>	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Butyl Acrylate CH <sub>2</sub> =CHCO <sub>2</sub> (CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub>	NX177* *Methyl Acrylate Tube		5-60	2	Material of acrylic resin	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	2 1 (UK)
n-Butylamine C <sub>4</sub> H <sub>9</sub> NH <sub>2</sub>	NX108VL* *Ammonia Tube		1-20	1	Organic synthesis intermediate, mfg. insecticide, emulsifying agent, medicine	3	10	Amines	C5
Butyl Cellosolve (Ethylene glycol monobutyl ether / 2-Butoxyethanol) C <sub>4</sub> H <sub>9</sub> OCH <sub>2</sub> CH <sub>2</sub> OH	NX151* *Ethyl Cellosolve Tube		10-1000	3	Organic solvent treating industrial hygiene	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	20 25 (UK)
Butyl Ether (CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	NX147L* *Ethyl Acetate Tube		10-1200	1	Organic solvent treating industrial hygiene	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	—
tert-Butyl Mercaptan (CH <sub>3</sub> ) <sub>3</sub> C <sub>2</sub> H <sub>4</sub> SH	NX188L* *Methyl Mercaptan Tube		1.1-11.0 0.55-5.5	1/2 ①	Industrial hygiene	2	10	Arsine, Hydrogen Selenide, H <sub>2</sub> S, HCN, PH <sub>3</sub>	—
	NX156M* *Ethyl Mercaptan Tube		5-80 2.5-40	①/2 1		2	10	H <sub>2</sub> S, PH <sub>3</sub> , Arsine, Hydrogen Selenide, HCN, NO <sub>2</sub> , NH <sub>3</sub> , SO <sub>2</sub> , Other Amines	
Butyl Methacrylate CH <sub>2</sub> =C(CH <sub>3</sub> )COOC <sub>4</sub> H <sub>9</sub>	NX147L* *Ethyl Acetate Tube		20-1000	1	Organic synthesis intermediate, mfg. synthetic resin, lubricant additive, rust-proof for metal, paper coating agent	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	—

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+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs	
tert-Butyl Methyl Ether (MTBE) (CH <sub>3</sub> ) <sub>3</sub> COCH <sub>3</sub>	NX147L* *Ethyl Acetate Tube		25-500	1	Fuel, powder, blast cell, antiknock, solvent, detergent	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	50	
n-Butyric Acid CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> COOH	NX102* *Acetic Acid Tube		3-60	1	Conflate artificial flavor, medicine; emulsifying agent	3	10	SO <sub>2</sub> (1/20 × Acetic Acid**), NO <sub>2</sub> (10), HCl (2 × Acetic Acid**), Cl <sub>2</sub> (5)	—	
Carbon Dioxide CO <sub>2</sub>	NX117VH		5-50%	1/2	Industrial hygiene	2	10		5000 500 (UK)	
	NX117H		1-20%	1	Combustion gas analysis	2	10	SO <sub>2</sub> (3000), H <sub>2</sub> S (3000), NO <sub>2</sub> (50)		
	NX117M		0.2-5.2% 0.1-2.6%	1/2 ①	Air contamination test in buildings, closed vessels, tunnels, other confined spaces, CO <sub>2</sub> concentration control in green houses, poultry farm, fruit storage	2	10	HCN (200), Cl <sub>2</sub> (100), SO <sub>2</sub> (500), H <sub>2</sub> S (100)		
	NX117VL		0.04-1.4% 0.02-0.7%	1/2 ①	Industrial hygiene	2	10	HCN		
	NX117L		0.05-1.0% 0.021-0.42%	① 2		2	10	HCN (100), Cl <sub>2</sub> (200), SO <sub>2</sub> , H <sub>2</sub> S (150), NO <sub>2</sub>		
Carbon Dioxide Concentration chart method CO <sub>2</sub>	NX117CVL		0.03-0.7% 100-1500	① 3	Industrial hygiene	2	10	HCN (100), Cl <sub>2</sub> (200), SO <sub>2</sub> , H <sub>2</sub> S (150), NO <sub>2</sub>		
Carbon Dioxide CO <sub>2</sub>	NX117VVL		200-4000 100-2000	1/2 ①	Industrial hygiene	2	10	NO <sub>2</sub> , H <sub>2</sub> S, HCl, SO <sub>2</sub> , HCN, Cl <sub>2</sub>	5000 5000 (UK)	
Carbon Dioxide CO <sub>2</sub>	NX801		100-3000	SPECIALTY TUBE SEE TABLE 6: NEXTTEQ COMPRESSED BREATHING AIR DETECTOR TUBES						
Carbon Disulfide CS <sub>2</sub>	NX118H	R	30-500	1	Manufacturing and recovery control in viscose rayon and cellophane plant	2	2 x 5	H <sub>2</sub> S (400), SO <sub>2</sub> , Cl <sub>2</sub>	1 5 (UK)	
	NX118M	R	2-50 0.8-20	② 4		3	2 x 5	H <sub>2</sub> S (120), SO <sub>2</sub> , Cl <sub>2</sub>		
	NX118L	R	0.1-3.0 0.2-6.4	④ 2		1	2 x 5	Sulfur Dioxide, Hydrogen Sulfide, Chlorine		
Carbon Disulfide CS <sub>2</sub>	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE						
Carbon Monoxide CO	NX119VVH	NR	0.2-20% 0.1-10%	1/2 ①	Insect control	3	10	Propane, Isobutane, Acetylene, Ethylene, Hexane	25 20 (UK)	

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+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Carbon Monoxide CO	NX119VH	NR	0.1-2.0%	1	Blast furnace, garage, parking garage, tunnel, atmospheric pollution survey, prediction of underground spontaneous combustion of coal, leakage detection of coal gas, combustible gas analysis, organic syntheses	1	10	Propane (0.15%), iso-Butane (0.2%), Hexane (0.1%), Acetylene (0.3%), Ethylene (0.15%)	
	NX119H		40-2000 <u>20-1000</u> 5-50	1/2 ① 4		3	10	Ethylene or H <sub>2</sub> (5000), Acetylene (1/5 × CO**), SO <sub>2</sub> (1/5 × CO**), NO <sub>2</sub> (1/5 × CO**)	
Carbon Monoxide -in the presence of Ethylene, Color intensity CO	NX119SB		Measurement for 30-300 seconds 10-1000	1	Prediction of underground spontaneous combustion of coal	3	10	H <sub>2</sub> S (1000), NO <sub>2</sub> (1), H <sub>2</sub> (10%)	25 20 (UK)
Carbon Monoxide -in the presence of Ethylene and Nitrogen oxides, Color intensity CO	NX119SA			1	Blast furnace, garage, parking garage, tunnel, atmospheric pollution survey, prediction of underground spontaneous combustion of coal, leakage detection of coal gas, combustible gas analysis, organic syntheses	2	10	H <sub>2</sub> (10%), H <sub>2</sub> S (1000)	
Carbon Monoxide CO Concentration chart method	NX119CL		25-1000 5-300	1 3	Blast furnace, garage, parking garage, tunnel, atmospheric pollution survey, combustion of coal gas	3	10	Ethylene (5000), H <sub>2</sub> (5000), Acetylene, SO <sub>2</sub> or NO <sub>2</sub> (1/5 × CO**)	
Carbon Monoxide CO	NX119M		30-500	1	Blast furnace, garage, parking garage, tunnel, atmospheric pollution survey, prediction of underground spontaneous combustion of coal, leakage detection of coal gas, combustible gas analysis, organic syntheses	1.5	10	Acetylene (1/20 × CO**), SO <sub>2</sub> (1/2 × CO**), NH <sub>3</sub> (100 × CO**), H <sub>2</sub> S (1/2 × CO**)	
Carbon Monoxide CO	NX119LM		10-250	3	Blast furnace, garage, parking garage, tunnel, atmospheric pollution survey, combustion of coal gas	2	10	Ethylene (5000), H <sub>2</sub> (5000), C <sub>2</sub> H <sub>2</sub> (1/5 × CO**), SO <sub>2</sub> (1/5 × CO**), NO <sub>2</sub> (1/5 × CO**)	25 20 (UK)
	NX119L		<u>1-50</u>	①	Blast furnace, garage, parking garage, tunnel, atmospheric pollution survey, prediction of underground spontaneous combustion of coal, leakage detection of coal gas, combustible gas analysis, organic syntheses	2	10	Formic Acid, SO <sub>2</sub> , C <sub>2</sub> H <sub>2</sub> , H <sub>2</sub> , H <sub>2</sub> S	

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+ Air Flow Control Orifice is required



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Carbon Monoxide CO	NX602		5-400	SPECIALTY TUBE SEE TABLE 4: NEXTTEQ TIME WEIGHTED AVERAGE DETECTOR TUBES					
	NX802		5-100 2.5-5	SPECIALTY TUBE SEE TABLE 6: NEXTTEQ COMPRESSED BREATHING AIR DETECTOR TUBES					
Carbon Monoxide in blood CO	NX711 +		20-90%COHb	SPECIALTY TUBE SEE TABLE 3: NEXTTEQ CRIMINAL INVESTIGATION TUBES					
Carbon Monoxide CO	NX301		10	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Carbon Tetrachloride (Tetrachloromethane) CCl <sub>4</sub>	NX120	R	5-60	1	Paint manufacture, fire extinguishers, waxes, polishes	1	2 x 5	Phosgene, Halogens, Cl <sub>2</sub> , Trichloroethylene, Halogenated hydrocarbons	5 1 (UK)
Carbonyl Sulfide COS	NX121		5-60	1	Process control in chemicals mfg.	3	2 x 5	SO <sub>2</sub> , CS <sub>2</sub> , H <sub>2</sub> S, n-Butane(0.1%)	5
Chloride Ion Cl <sup>-</sup>	NX401H		10-2000	SPECIALTY TUBE SEE TABLE 7: NEXTTEQ DISSOLVED SUBSTANCE DETECTOR TUBES					
	NX401L		1-60	SPECIALTY TUBE SEE TABLE 7: NEXTTEQ DISSOLVED SUBSTANCE DETECTOR TUBES					
	NX401M		3-200	SPECIALTY TUBE SEE TABLE 7: NEXTTEQ DISSOLVED SUBSTANCE DETECTOR TUBES					
Chlorine Cl <sub>2</sub>	NX301		5	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
Chlorine Cl <sub>2</sub>	NX122H		1-40	1	Leakage detection in electrolytic soda plant, leakage detection & concentration control in synthetic rubber & plastics industry, refinery of titanium & aluminum, chlorinated hydrocarbons, synthetic chemistry, industrial hygiene	2	10	Br <sub>2</sub> (1), ClO <sub>2</sub> (1), NO <sub>2</sub> (1/2 × Cl <sub>2</sub> **)	0.1
	NX122M		0.5-10.0 0.125-2.5 0.1-2.0	① 4 5		2	10	Br <sub>2</sub> (1), ClO <sub>2</sub> (1), NO <sub>2</sub> (1/5 × Cl <sub>2</sub> **), NCl <sub>3</sub> (5)	
	NX122L		0.1-2 0.05-1	① 2		2	10	HCl (20 × Cl <sub>2</sub> **), NO <sub>2</sub>	
Chlorine Dioxide Concentration chart method ClO <sub>2</sub>	NX123C		1-20	1	Leakage detection in textile & paper bleaching plant, water treatment	2	10	Br <sub>2</sub> , Cl <sub>2</sub> or NO <sub>2</sub> (1)	C 0.1 0.1 (UK)

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+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/ box	Interferences (ppm)	USA TLV ppm (UK) WELs
Chlorobenzene C <sub>6</sub> H <sub>5</sub> C	NX124		5-140 1-5	① 5	Industrial hygiene	2	2 x 5	Toluene, Xylene, CO (50), n-Hexane (100), Benzene, Ethyl Benzene	10 1 (UK)
m-Chlorotoluene C <sub>6</sub> H <sub>4</sub> Cl(CH <sub>3</sub> )	NX221L* *Vinyl Chloride Tube		0.5-10	SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS					
o-Chlorotoluene ClC <sub>6</sub> H <sub>4</sub> CH <sub>3</sub>	NX221L* *Vinyl Chloride Tube		1-50	SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS					
p-Chlorotoluene ClC <sub>6</sub> H <sub>4</sub> CH <sub>3</sub>	NX221L* *Vinyl Chloride Tube		1-50	SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS					
Chloroform (Trichloromethane) CHCl <sub>3</sub>	NX125	R	70-500 35-250 23-167	② 3 4	Industrial hygiene (suspected carcinogen in humans)	2	2 x 5	Halogens, Halogenated hydrocarbons, n-Hexane (200)	10 2 (UK)
Chloropicrin (Nitrotrichloromethane) Cl <sub>3</sub> CNO <sub>2</sub>	NX126	R	0.1-16.0 0.05-8.0	① 2	Industrial hygiene	1	2 x 5	Carbon Tetrachloride, Phosgene	0.1
Chloroprene (2-Chlorobutadiene) CH <sub>2</sub> =CClCH=CH <sub>2</sub>	NX127		1.0-20 0.5-10	1 ②	Industrial hygiene	3	2 x 5	Cl <sub>2</sub> , HCl (2000), Vinyl Chloride, Acetylene, Ethylene	1
Copper Ion Cu <sup>2+</sup>	NX402		1-100mg/L	SPECIALTY TUBE SEE TABLE 7: NEXTTEQ DISSOLVED SUBSTANCE DETECTOR TUBES					
Cresol C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> )OH	NX202* *Phenol Tube		0.5-25.0	2	Industrial hygiene	2	10	NH <sub>3</sub> (200), Aliphatic amines (50), Aromatic hydrocarbons (50), Phenols (2.5)	20mg/m3
Cresol C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> )OH	NX302		20	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Crotonaldehyde CH <sub>3</sub> CH=CHCHO	NX151* *Ethyl Cellosolve Tube		2-40	3	Compound materials	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	C 0.3
Cumene (Isopropylbenzene) C <sub>6</sub> H <sub>5</sub> CH(CH <sub>3</sub> )	NX147L* *Ethyl Acetate Tube		20-140	1	Organic synthesis intermediates, fuel	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	50 25 (UK)
Cyanide Ion CN <sup>-</sup>	NX403		0.2-5	SPECIALTY TUBE SEE TABLE 7: NEXTTEQ DISSOLVED SUBSTANCE DETECTOR TUBES					
Cyclohexane C <sub>6</sub> H <sub>12</sub>	NX128		0.01-0.6%	1	Fire hazard detection in paints industry & painting, extraction process of oils, fats, waxes	3	10	Paraffin hydrocarbons, Acetylene, Ethylene, Benzene (400), Toluene (800), Xylene (2000)	100 100 (UK)
Cyclohexane C <sub>6</sub> H <sub>12</sub>	NX160* *General Hydrocarbon Tube		50-1400	①	Industrial hygiene	2	10	Aromatic hydrocarbons, Alcohols, Esters, Ketones	—

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/ box	Interferences (ppm)	USA TLV ppm (UK) WELs
Cyclohexanol C <sub>6</sub> H <sub>11</sub> OH	NX129		5-500	2	Process control in synthetic rubber industry	2	10	Other alcohols	50 50 (UK)
Cyclohexanone C <sub>6</sub> H <sub>10</sub> O	NX130		2-100	3	Organic solvent treating, Industrial hygiene	3	10	Alcohols	20 10 (UK)
Cyclohexene C <sub>6</sub> H <sub>10</sub>	NX147L* *Ethyl Acetate Tube		20-300	1	Medicament, synthetic intermediate	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	300
Cyclohexylamine C <sub>6</sub> H <sub>11</sub> NH <sub>2</sub>	NX108VL* *Ammonia Tube		1-20	1	Organic synthesis, plasticizer, rubber processing, corrosion inhibitor, dyes, dry-clean detergent, mfg. emulsifying agent	3	10	Amines	10 10 (UK)
p-Cymene CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	NX103L* *Acetone Tube		20-200	SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS					
Decahydronaphthalene C <sub>10</sub> H <sub>18</sub>	NX147L* *Ethyl Acetate Tube		20-200	1	Solvent, detergent, wax for floor	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	—
n-Decane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>8</sub> CH <sub>3</sub>	NX147L* *Ethyl Acetate Tube		5-90	1	Organic synthesis intermediate, solvent, detergent	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	—
Diacetone Alcohol (4-Hydroxy-4-methyl-2- pentanone) (CH <sub>3</sub> ) <sub>2</sub> C(OH)CH <sub>2</sub> COCH <sub>3</sub>	NX151* *Ethyl Cellosolve Tube		10-250	3	Fire hazard detection in paints industry, industrial hygiene	2	10	Alcohols, Halogenated hydrocarbons, Paraffin hydrocarbons, Aromatic hydrocarbons, Esters	50 50 (UK)
Diborane B <sub>2</sub> H <sub>6</sub>	NX131		0.1-5.0 0.05-2.5 0.02-1.0	① 2 5	Industrial hygiene, semiconductor mfg. process	2	10	Arsine, Phosphine, Silane, Disilane	0.1
Dibromomethane CH <sub>2</sub> Br <sub>2</sub>	NX180M* *Methyl Bromide Tube	R	2.5-40	1		3	2 x 5		—
Di-n-Butylamine (C <sub>4</sub> H <sub>9</sub> ) <sub>2</sub> NH	NX108VL* *Ammonia Tube		2-20	1	Mfg. dye	3	10	Amines	—
o-Dichlorobenzene C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub>	NX132		5-100	1	Solvent insecticide, industrial hygiene	2	10	Alcohols, Paraffin hydrocarbons, Halogenated hydrocarbons, Esters, Aromatic hydrocarbons	25 25 (UK)
p-Dichlorobenzene C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub>	NX133	R	10-150	1	Solvent insecticide, industrial hygiene	1	10	Benzene, Toluene, Hexane	10 2 (UK)
p-Dichlorobenzene p-C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub>	NX502		0.01-0.40	SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES					

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/ box	Interferences (ppm)	USA TLV ppm (UK) WELs
1,1-Dichloroethane (Ethylidene Dichloride) CH <sub>3</sub> CHCl <sub>2</sub>	NX134	R	10-160	1	Industrial hygiene	1	3 x 5	Nitrogen Oxides, Halogens, Halogenated hydrocarbons, Hexane (20), Alcohols (400), Toluene (20)	100 100 (UK)
1,2-Dichloroethane (Ethylene Dichloride) ClCH <sub>2</sub> CH <sub>2</sub> Cl	NX135	R	11-110 5-50 2.5-25 1-10	1/2 ① 2 5		1	3 x 5	Nitrogen Oxides, Halogens, Halogenated hydrocarbons, Hexane (100)	10 5 (UK)
2,2-Dichloroethyl Ether (ClCH <sub>2</sub> CH <sub>2</sub> ) <sub>2</sub> O	NX136	NR	2-30	1		1	2 x 5	Halogenated hydrocarbon	5
1,1-Dichloroethylene CH <sub>2</sub> =CCl <sub>2</sub>	NX221L* *Vinyl Chloride Tube		1-22	SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS					
1,2-Dichloroethylene (Acetylene dichloride) ClCH=CHCl	NX137	R	42-840 20-400 9.2-184 4.2-84	1/2 ① 2 4	Extraction of natural dyes, mfg. perfumes, paints industry & painting, fermentation, industrial hygiene	1	10	Vinyl Chloride, Hydrogen Chloride, Trichloroethylene, Cl <sub>2</sub>	200 200 (UK)
Dichloromethane (Methylene chloride) CH <sub>2</sub> Cl <sub>2</sub>	NX138	R	30-1000 10-200	② 4	Industrial hygiene	2	2 x 5	Halogens, Halogenated hydrocarbons	50 100 (UK)
1,2-Dichloropropane CH <sub>3</sub> CHClCH <sub>2</sub> Cl	NX180M* *Methyl Bromide Tube	R	20-250	1		3	2 x 5		10
1,3-Dichloropropane ClCH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> Cl	NX139	R	10-500	1		1	2 x 5	Halogenated hydrocarbons	—
1,3-Dichloropropene ClCH <sub>2</sub> CH=CHC	NX140		0.5-10	1	Fumigation in soil by the name of D-D	3	2 x 5	Chloropicrin (1800), MITC (600)	1
Dicyclopentadiene C <sub>10</sub> H <sub>12</sub>	NX151* *Ethyl Cellosolve Tube		2-60	3	Mfg. EP rubber, unsaturated polyester resins, coating materials and perfume	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	0.5 5 (UK)
Diesel fuel	NX224		0.5-12.5 1-30	4 ②	To monitor residual and leakage of tank	2	10	Propane, Isobutane, Hexane, Octane, Gasoline	100mg/ m3
Diethylamine (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> NH	NX141		1-20	1	Industrial hygiene	3	10	NH <sub>3</sub> , Other amines	5 5 (UK)
Diethylbenzene C <sub>6</sub> H <sub>4</sub> (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub>	NX147L* *Ethyl Acetate Tube		10-180	1	Organic synthesis intermediate, solvent, detergent	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	—

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/ box	Interferences (ppm)	USA TLV ppm (UK) WELs
Diethyl Ether (Ethyl Ether)  (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> O	NX142M		0.04-1.4%	1	Fire hazard detection in solvent extraction process, hospital, laboratory, organic syntheses, clinical laboratories, explosive mfg.	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors except Halogenated hydrocarbons (50)	400 100 (UK)
	NX142L		20-400	1		2	10	Alcohols, Ketones, Esters, Aromatic hydrocarbons	
Diisobutyl Ketone [(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> ] <sub>2</sub> CO	NX184L* *Methyl Ethyl Ketone Tube		20-1000	1		2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons, Halogenated hydrocarbons, Paraffin hydrocarbons	25
Di-iso-Propylamine [(CH <sub>3</sub> ) <sub>2</sub> CH] <sub>2</sub> NH	NX108VL* *Ammonia Tube		1-16	1	Dyestuffs, surfactant, herbicide	3	10	Amines	5 5 (UK)
N,N-Dimethylacetamide CH <sub>3</sub> CON(CH <sub>3</sub> ) <sub>2</sub>	NX143		5-70	2	Solvents for chemical reaction, refinery and resins paint remover	1	10	CO <sub>2</sub> , NH <sub>3</sub> , Amines, Hydrazine	10 10 (UK)
Dimethyl Amine	NX179* *Methyl Amine Tube		1-20	1		3	10	Ammonia, Other Amines	—
N,N-Dimethyl Aniline C <sub>6</sub> H <sub>5</sub> N(CH <sub>3</sub> ) <sub>2</sub>	NX108VL* *Ammonia Tube		0.5-9	1	Mfg. vanillin, dye	3	10	Amines	5 5 (UK)
Dimethyl Ether (Methyl Ether)  CH <sub>3</sub> OCH <sub>3</sub>	NX144		0.01-1.2%	1	Impurity test of Methyl chloride, process control, refrigeration	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors except Halogenated hydrocarbons	400 (UK)
N,N-Dimethyl Formamide (CH <sub>3</sub> ) <sub>2</sub> NCHO	NX145		2-30 1-15	① 2	Stationary phase of chromatography	2	10	SO <sub>2</sub> (200), CO <sub>2</sub> (0.1%), NH <sub>3</sub> , Amines, Hydrazine	5 5 (UK)
Dimethyl Sulfide  (CH <sub>3</sub> ) <sub>2</sub> S	NX225		0.21-7.9 1-40 2.1-100	4 ① 1/2	Odorant for LPG, food flavor for coffee, chocolate, cocoa, synthetic intermediate/essential oil, etc.	3	10	Mercaptans, Butane	10
1,4-Dioxane  C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	NX184M* *Methyl Ethyl Ketone Tube		0.05-2.5%	2	Fire hazard detection in paints & painting industry, industrial hygiene	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors except Halogenated hydrocarbons (50)	20 20 (UK)
	NX178L* *Methyl Alcohol Tube		20-500	1	Fire hazard detection in paints & painting industry, industrial hygiene	2	10	Alcohols, Toluene (500)	
Di-n-Propylamine [CH <sub>3</sub> (CH <sub>2</sub> ) <sub>2</sub> ] <sub>2</sub> NH	NX108VL* *Ammonia Tube		1-14	1	Synthesis intermediate	3	10	Amines	—
Disilane  Si <sub>2</sub> H <sub>6</sub>	NX209* *Silane Tube	R	1-50		SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS				

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required





**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Divinyl Benzene <chem>C6H4(CHCH2)2</chem>	NX210LM* *Styrene Tube		5-50	1	Ion exchange resin and membrane, synthetic rubber, etc.	3	10	Methanol (0.35%), Ethanol (0.18%), Ethyl Acetate (700), Butyl Acetate (700), Butadiene (5), Formaldehyde (15), Acetaldehyde (350), Acrylonitrile (400)	10
Epichlorohydrin (1-Chloro-2,3 epoxypropane) <chem>CH2CHCH2Cl</chem> 	NX146	NR	5-50	3	Mfg. epoxy resin, chlorinated rubber, glycerin	1	2 x 5	Halogenated hydrocarbons	0.5 0.5 (UK)
Ethyl Acetate <chem>CH3CO2C2H5</chem>	NX147M		0.1-5.0%	1	Fire hazard detection in paints industry & painting, mfg, artificial leather, artificial silk, perfumes & flavors, photographic films & plates	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors except Halogenated hydrocarbons (50)	400 200 (UK)
	NX147L		10-1000	1	Fire hazard detection in paints industry & painting	2	10	Other esters, Ketones, Alcohols, Aromatic hydrocarbons, Halogenated hydrocarbons	
Ethyl Acetate <chem>CH3CO2C2H5</chem>	NX302		600	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Ethyl Acrylate <chem>CH2=CHCO2C2H5</chem>	NX177* *Methyl Acrylate Tube		5-60	2	Material of acrylic resin	2	10	Alcohols, Paraffin hydrocarbons, Esters, Halogenated hydrocarbons, Aromatic hydrocarbons	5 5 (UK)
Ethyl Alcohol (Ethanol) <chem>C2H5OH</chem>	NX148L		0.05-5.0%	1	Fire hazard detection in hospital, laboratory, pharmaceutical industry, mfg. perfumes & cosmetics	3	10	Paraffin hydrocarbons, Alcohols, Esters, Ketones, Aromatic hydrocarbons, Halogenated hydrocarbons	STEL 1000 1000 (UK)
	NX148VL		20-1000	1		2	10	Alcohols, Aliphatic hydrocarbons (more than C <sub>3</sub> ), Aromatic hydrocarbons, Esters, Ethers, Halogenated hydrocarbons, Ketones	
	NX148VVL		20-300	1		3	2 x 5	Alcohols, 1,3-Butadiene, Hydrogen Sulfide, Isobutylene, Acetone, n-Hexane, Ammonia	
Ethyl Alcohol in blood <chem>C2H5OH</chem>	NX712 +		0.2-2.0 mg/mL	SPECIALTY TUBE SEE TABLE 3: NEXTTEQ CRIMINAL INVESTIGATION TUBES					

\*\* Interference from the listed substance will occur at concentrations above the levels listed in parentheses  
+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Ethylamine C <sub>2</sub> H <sub>5</sub> NH <sub>2</sub>	NX179* *Methyl Amine Tube		1-20	1		3	10	Ammonia, Other Amines	5 2 (UK)
Ethylamine C <sub>2</sub> H <sub>5</sub> NH <sub>2</sub>	NX302		100		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
Ethyl Benzene C <sub>6</sub> H <sub>5</sub> C <sub>2</sub> H <sub>5</sub>	NX149		10-500	1		1.5	10	Toluene (25), Xylene (50), Benzene (10), Methanol (1%), Hexane (0.1%)	20 100 (UK)
Ethyl Benzene C <sub>6</sub> H <sub>4</sub> (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub>	NX509* *Toluene Tube	R	0.05-1.2		SPECIALTY TUBE SEE TABLE 5: NEXTEQ HIGH SENSITIVITY DETECTOR TUBES				
Ethyl Benzene	NX302		60		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
	NX302		400		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
Ethyl Bromide C <sub>2</sub> H <sub>5</sub> Br	NX180M* *Methyl Bromide Tube	R	20-400 2-80	1/2 Ⓢ		3	2 x 5		5
Ethyl-tert-Butyl Ether (ETBE) C <sub>2</sub> H <sub>5</sub> OC(CH <sub>3</sub> ) <sub>3</sub>	NX150		1-60	3	Used for automobile fuel adding the ETBE in Gasoline	1	10	Ethanol	25
Ethyl Cellosolve (Ethylene glycol monoethylether) (2-Ethoxyethanol) C <sub>2</sub> H <sub>5</sub> OCH <sub>2</sub> CH <sub>2</sub> OH	NX151		5-500	3	Organic solvent treating	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	5 2 (UK)
Ethyl Cellosolve	NX302		100		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
Ethyl Cellosolve Acetate (Ethylene glycol ethyl ether acetate) CH <sub>3</sub> COO(CH <sub>2</sub> ) <sub>2</sub> OC <sub>2</sub> H <sub>5</sub>	NX151* *Ethyl Cellosolve Tube		5-150	3	Organic solvent treating	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	5 2 (UK)
Ethyl Ether (Diethyl Ether) (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> O	NX142M		0.04-1.4%	1	Fire hazard detection in solvent extraction process, hospital, laboratory, organic syntheses, clinical laboratories, explosive mfg.	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors except Halogenated hydrocarbons (50)	400 100 (UK)
	NX142L		20-400	1		2	10	Alcohols, Ketones, Esters, Aromatic hydrocarbons	
Ethyl Mercaptan (Ethanethiol) C <sub>2</sub> H <sub>5</sub> SH	NX156MH		4-160 2-80 1-40	1 Ⓢ 4	Atmospheric pollution survey, concentration control of odorant, plastics manufacture	2	10	Methyl Sulfide (1), NO <sub>2</sub> (1), Cl <sub>2</sub> (0.2)	0.5 0.5 (UK)
	NX156M		5-80 2.5-40	Ⓢ 1	Odorant for LP gas	2	10	H <sub>2</sub> S, PH <sub>3</sub> , Arsine, Hydrogen Selenide, HCN, NO <sub>2</sub> , NH <sub>3</sub> , SO <sub>2</sub> , Other Amines	
	NX188L* *Methyl Mercaptan Tube		1-10 0.5-5.0	1/2 Ⓢ	Industrial hygiene	2	10	Arsine, Hydrogen Selenide, H <sub>2</sub> S, HCN, PH <sub>3</sub>	

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses  
+ Air Flow Control Orifice is required



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Ethyl Methacrylate $CH_2 = C(CH_3)COOC_2H_5$	NX147L* *Ethyl Acetate Tube		20-500	1	Organic synthesis intermediate; mfg. synthetic resin, lubricant additive, rust-proof for metal, paper coating agent	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	—
Ethylene -Color intensity $H_2C = CH_2$	NX152CL		0.5-100 0.1-20	① 5	Coal mining safety, concentration control in fruits ripening, organics, mfg. plastics	3	10	CO, NO <sub>2</sub> (1), Cl <sub>2</sub> , Butane, Pentane, Acetylene, H <sub>2</sub> S (1000), HCN, CS <sub>2</sub> , NH <sub>3</sub> , H <sub>2</sub> (10%)	200
Ethylene $H_2C = CH_2$	NX152M		20-1200	1		2	10	CO, H <sub>2</sub> S, Acetylene, Propylene	
Ethylene $H_2C = CH_2$	NX152L		1-200	4	Used for fruit ripening control	2	2 x 5	Acetylene, CO, Propylene, H <sub>2</sub> S	
Ethylene	NX302		10	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Ethylene Chlorohydrine $ClCH_2CH_2OH$	NX178L* *Methyl Alcohol Tube		5-300	SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS					
Ethylene Dibromide (1, 2-Dibromoethane) $BrCH_2CH_2Br$	NX153	R	1-50	1	Concentration control in granary fumigation process	1	2 x 5	Halogens or Halogenated hydrocarbons, Hexane (200)	0.5 (UK)
Ethylene Glycol (Monoethylene glycol) $HOCH_2CH_2OH$	NX154M		20-250 mg/m <sup>3</sup>	2	Industrial hygiene	1.5	2 x 5	Ethylene Oxide, SO <sub>2</sub> , Aldehydes, H <sub>2</sub> S	25 20 (UK)
	NX154L	NR	3-40 mg/m <sup>3</sup>	3		2	2 x 5	Aldehydes, SO <sub>2</sub> , H <sub>2</sub> S	
Ethylene Oxide $CH_2CH_2O$	NX155VH		1.0-4.0% 0.01-1.8%	1/2 ①	Concentration control in fumigation of foodstuffs & textiles, fire hazard detection in ethylene glycol plant, sterilization	3	10	Alcohols, Ketones, Aromatic hydrocarbons, Esters, Halogenated hydrocarbons (0.5%)	1 5 (UK)
	NX155H		130-2600 50-1000	1/2 ①		3	10	Alcohols, Esters, Ethers, Ketones, Aromatic hydrocarbons, Aliphatic hydrocarbons (over C <sub>3</sub> ), Halogenated hydrocarbons	
	NX155M		5-100	3		3	10	Alcohols, Esters, Aromatic hydrocarbons	
	NX155L		1-15	3	Concentration control in fumigation & textiles	2	2 x 5	Aldehydes, SO <sub>2</sub> , H <sub>2</sub> S	
	NX155VL	R	0.7-14 0.1-2.0	1 ④	Atmospheric pollution surveys in hospitals	1	2 x 5	Formaldehyde (0.5)	
Ethylene Oxide $CH_2CH_2O$	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Formaldehyde HCHO	NX157H	R	20-1500	1	Atmospheric pollution survey, germicide, fungicide, organic mfg, industrial hygiene	2	2 x 5	Other Aldehydes	0.1 2 (UK)
	NX157M		1-35	3		3	2 x 5	Other Aldehydes (1), Styrene, Ether (1000), Ethyl Acetate (1000), Trichloroethylene (500)	
	NX157L	R	0.1-4.0 0.05-2.0	Ⓢ 10		1	10	Acetaldehyde, NH <sub>3</sub> (10), NO <sub>2</sub> (3)	
Formaldehyde HCHO	NX503L	R	0.01-0.12 0.04-0.48	SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES					
	NX503H	R	0.01-0.50	SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES					
	NX503M	R	0.05-1.0 0.10-2.0	SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES					
Formaldehyde HCHO	NX302		10	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Formic Acid HCOOH	NX102* *Acetic Acid Tube		1-50	1	Mfg. organic medicine, industrial hygiene	3	10	SO <sub>2</sub> (1/20 x HCOOH), NO <sub>2</sub> (10), HCl (2 x HCOOH), Cl <sub>2</sub> (5), Acetic acid	5 5 (UK)
Free Residual Chlorine Cl <sub>2</sub>	NX404		0.4-5	SPECIALTY TUBE SEE TABLE 7: NEXTTEQ DISSOLVED SUBSTANCE DETECTOR TUBES					
Furan (Furfuran) C <sub>4</sub> H <sub>4</sub> O	NX155VH* *Ethylene Oxide Tube		0.2-2.0% 0.01-0.9%	1/2 Ⓢ	Fire hazard detection in paints industry & painting	3	10	Aromatic hydrocarbons, Esters, Ketones, Alcohols, Halogenated hydrocarbons	—
Furfural (2-Furaldehyde) C <sub>5</sub> H <sub>4</sub> O <sub>2</sub>	NX151* *Ethyl Cellosolve Tube		2-60	3	Materials of Nylon 66, insecticide	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	0.2 2 (UK)
Furfuryl alcohol C <sub>4</sub> H <sub>3</sub> OCH <sub>2</sub> OH	NX158		5-25	5	Material of furan resin, resin denaturant, solvent, industrial hygiene	1	10		0.2
Gasoline (Petrol) C <sub>n</sub> H <sub>m</sub>	NX159		0.05-0.6% 0.01-0.12%	Ⓢ 4	Process control, industrial hygiene	3	10	Paraffin hydrocarbons, Acetylene, Ethylene, Cyclohexane, Benzene (400) Toluene (800), Xylene (2000)	300
Gasoline / Kersoene	NX701		—	SPECIALTY TUBE SEE TABLE 3: NEXTTEQ CRIMINAL INVESTIGATION TUBES					
Gasoline / Kersoene	NX702		—	SPECIALTY TUBE SEE TABLE 3: NEXTTEQ CRIMINAL INVESTIGATION TUBES					
Gasoline	NX302		0.1 mg/l	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
General Hydrocarbons	NX160		50-1400 (as N-Hexane)	1		2	10	Aromatic hydrocarbons	—

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Heptane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>5</sub> CH <sub>3</sub>	NX160* *General Hydrocarbon Tube		75-1200	1	Industrial hygiene	2	10	Aromatic hydrocarbons, Alcohols, Esters, Ketones	—
Heptane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>5</sub> CH <sub>3</sub>	NX161M* *n-Hexane Tube		100-2000	1	Industrial hygiene	2	10	Paraffin hydrocarbons, Aromatic hydrocarbons, Alcohols (6%), Ketones (6%), Esters (6%)	400 500 (UK)
Heptane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>5</sub> CH <sub>3</sub>	NX302		10	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Hexane	NX302		10	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
n-Hexane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>4</sub> CH <sub>3</sub>	NX161H		0.11-1.32% (0.05-0.6%)	1/2 ①	Solvent recovery control & fire hazard detection in extraction of oils & fats, paints industry & painting	3	10	Paraffin hydrocarbons, Acetylene, Ethylene, Cyclohexane, Benzene (400), Toluene (800), Xylene (2000)	50 20 (UK)
	NX161M		50-1400	1		2	10	Paraffin hydrocarbons, Aromatic hydrocarbons	
	NX161L		16-800 4-200	1 ③		2	10	Toluene	
n-Hexane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>4</sub> CH <sub>3</sub>	NX160* *General Hydrocarbon Tube		50-1400	①	Industrial hygiene	2	10	Aromatic hydrocarbons, Alcohols, Esters, Ketones	—
Hydrazine (Amidrazone) N <sub>2</sub> H <sub>4</sub>	NX162	NR	0.2-10.0 0.1-5.0 0.05-2.5	2 ④ 8	Rocket fuel, corrosion protection of boiler, antioxidant	2	10	NH <sub>3</sub> , Amines	0.01 0.02 (UK)
Hydrazine N <sub>2</sub> H <sub>4</sub>	NX301		5	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
Hydrogen H <sub>2</sub>	NX163		0.05 - 0.8%	1/2	Industrial hygiene	3	5	Ethanol (0.4%), CO (500)	
Hydrogen Chloride HCl	NX164M		40-1200 20-600	1/2 ①	Industrial hygiene, process control, leakage detection, fire hazard detection, pharmaceuticals organics mfg.	2	2 x 5	SO <sub>2</sub> , Cl <sub>2</sub>	C2 1 (UK)
	NX164L		4-40 2-20 0.4-4	1/2 ① 5		3	2 x 5	Cl <sub>2</sub>	
Hydrogen Chloride HCl	NX301		20	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
Hydrogen Cyanide HCN	NX165H		0.01-3.0%	1	Concentration control in fumigation process	3	10	Acetone, CS <sub>2</sub> , SO <sub>2</sub> (200), H <sub>2</sub> S (100), Dicyanide	C4.7 0.9 (UK)
	NX165M	R	2-100 0.5-25	① 4	Electro-plating, metal hardening, fumigation process, industrial hygiene	2	10	SO <sub>2</sub> (1), H <sub>2</sub> S (3), NH <sub>3</sub> (5)	
	NX165L	R	0.3-8	3		1	2 x 5	SO <sub>2</sub> (1), PH <sub>3</sub> , H <sub>2</sub> S, NH <sub>3</sub> (2)	
Hydrogen Cyanide in blood HCN	NX713 +	R	2-30mg/L	SPECIALTY TUBE SEE TABLE 3: NEXTTEQ CRIMINAL INVESTIGATION TUBES					
Hydrogen Fluoride HF	NX166		0.5-30 0.25-15 0.17-2	③ 6 9	Dehydrator, mfg. of Hydrofluoric acid, and Freon, industrial hygiene	3	10	Cl <sub>2</sub> , HCl	0.5 1.8 (UK)
Hydrogen Fluoride HF	NX504		0.05-1.0	SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES					

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Hydrogen Peroxide H <sub>2</sub> O <sub>2</sub>	NX167	R	0.5-10.0	5	Mfg. bleach, industrial chemicals and medicine	1	10	HCHO (10)	1 1 (UK)
Hydrogen Selenide H <sub>2</sub> Se	NX168		5-600 1-120	① 5	Doping gas analysis in mfg. semiconductor, industrial hygiene	1	10	Arsine (10), H <sub>2</sub> S, Iron Carbonyl (10), SO <sub>2</sub> , Hg <sub>2</sub> , Acetylene (3%), CO (0.1%), Nickel Carbonyl (10)	0.05
	NX131* *Diborane Tube		1-20 0.5-10	① 2					
Hydrogen Sulfide -ultra high range H <sub>2</sub> S	NX169UH		5-40% 2.5-5%	①/2 1	Oil field (esp. oil well)	3	5	SO <sub>2</sub> (8%)	1 5 (UK)
	NX169VVH		2-20%	1/2					
Hydrogen Sulfide H <sub>2</sub> S	NX169VH		0.1-4.0%	1	Process control in sulfur recovery plant in petroleum refinery	3	10	SO <sub>2</sub> (0.5%)	1 5 (UK)
	NX169H		0.1-1.2% 0.05-0.6%	1/2 ①					
	NX169M		100-2000 50-1000 25-500	1/2 ① 2	Impurity test of industrial raw gases, chemicals mfg., metallurgy	3	10	SO <sub>2</sub> (5000), Mercaptans	
	NX169MH		50-1600	1	Process control in sulfur recovery plant in petroleum refinery				
	NX169LM		6-300 3-150 1-50 0.75-37.5	1/2 ① 3 4	Mfg. viscose rayon, oil refinery, metal refinery, gas manufacture, chemical laboratory, process control	3	10	SO <sub>2</sub> (12), Mercaptans (550), NO <sub>2</sub> (2)	
	NX169VL		2-40 1-20 0.5-10	1/2 ① 2	Process control in sulfur recovery plant in petroleum refinery				
	NX169VVL		0.2-6.0 0.1-3.0	1/2 ①	Industrial hygiene	2	10	Arsine, Hydrogen Selenide, Mercaptans, PH <sub>3</sub> , HCN, SO <sub>2</sub>	
	NX169L		2-60 1-30	1/2 ①	Process control in sulfur recovery plant in petroleum refinery				
Hydrogen Sulfide H <sub>2</sub> S	NX301		10	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					

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+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Hydrogen Sulfide-Mercaptans -separate measurement H <sub>2</sub> S & R-SH	NX170		H <sub>2</sub> S; 1-30	1		2	2 x 5	Tube for H <sub>2</sub> S; SO <sub>2</sub> (1/3 x H <sub>2</sub> S**), NO <sub>2</sub> (1/5 x H <sub>2</sub> S**),	1 5 (UK)
			R-SH; 0.5-5.5					Tube for R-SH; NO <sub>2</sub> (1), NH <sub>3</sub> (1), H <sub>2</sub> S (30)	—
Hydrogen Sulfide H <sub>2</sub> S	NX603		1-20		SPECIALTY TUBE SEE TABLE 4: NEXTTEQ TIME WEIGHTED AVERAGE DETECTOR TUBES				
Hydrogen Sulfide in blood H <sub>2</sub> S	NX714 +	R	0.1-1.0 µg/mL		SPECIALTY TUBE SEE TABLE 3: NEXTTEQ CRIMINAL INVESTIGATION TUBES				
Iodine I <sub>2</sub>	NX194M* *Nitrogen Dioxide Tube		0.7-42		SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS				
Isobutane (CH <sub>3</sub> ) <sub>3</sub> CH	NX160* *General Hydrocarbon Tube		40-1120	1	Industrial hygiene	2	10	Aromatic hydrocarbons, Alcohols, Esters, Ketones	—
Isobutane (CH <sub>3</sub> ) <sub>3</sub> CH	NX161M* *n-Hexane Tube		50-1200	1	Industrial hygiene	2	10	Alcohols, Ketones or Esters (60%), Aromatic hydrocarbons, Paraffin hydrocarbons	STEL 1000
Isobutyl Acetate CH <sub>3</sub> CO <sub>2</sub> CH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	NX184M* *Methyl Ethyl Ketone Tube		0.01-1.4%	2	Fire hazard detection in paints industry & painting, mfg. artificial leather, textile sizing compounds, printing inks	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors except Halogenated hydrocarbons (50)	50 150 (UK)
	NX171		10-400	1	Industrial hygiene	1	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	
Isobutyl Acrylate CH <sub>2</sub> =CHCO <sub>2</sub> CH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	NX177* *Methyl Acrylate Tube		5-60	2	Industrial hygiene	2	10	Alcohols, Paraffin hydrocarbons, Esters, Halogenated hydrocarbons, Aromatic hydrocarbons	—
Isobutyl Alcohol (Isobutanol) (CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> OH	NX172		5-100	3	Detergent of paint and varnish, mfg. esters for fruit essence, industrial hygiene	2	10	Alcohols, Toluene	50 50 (UK)
Isobutylene (CH <sub>3</sub> ) <sub>2</sub> C=CH <sub>2</sub>	NX161M* *n-Hexane Tube		0.03-2.0%	1	Mfg. butyl-rubber	2	10	Paraffin, Aromatic hydrocarbons, Alcohols (6%), Ketones (6%), Esters (6%)	—
Isobutyric Acid (CH <sub>3</sub> ) <sub>2</sub> CHCOOH	NX102* *Acetic Acid Tube		3-50	1	Disinfectant, artificial flavor, substrate for perfume, tan processing	3	10	SO <sub>2</sub> (1/20 x Acetic acid**), NO <sub>2</sub> (10), HCL (2 x Acetic acid**), Cl <sub>2</sub> (5)	—
Isopentyl Acetate (Isoamyl acetate) CH <sub>3</sub> CO <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	NX173		10-400	1	Industrial hygiene	1	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	—
Isopentyl Alcohol (Isoamyl alcohol) (CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> CH <sub>2</sub> OH	NX174		5-100	3	Stabilizer for Sodium thiosulfate (hypo), industrial hygiene	2	10	Alcohols, Toluene	100 100 (UK)
Isophorone C <sub>9</sub> H <sub>14</sub> O	NX130* *Cyclohexanone Tube		5-80	3	Solvent, ink, paint, lacquer, adhesive, copolymer, lag, finish and biocide	3	10	Alcohols	C5

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+ Air Flow Control Orifice is required



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Isoprene $\text{CH}_2 = \text{C}(\text{CH}_3)\text{CH} = \text{CH}_2$	NX151* *Ethyl Cellosolve Tube		1-16	3	Industrial hygiene	2	10	Alcohols, Esters, Aliphatic hydrocarbons (over C <sub>3</sub> ), Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	—
Isopropyl Acetate $\text{CH}_3\text{CO}_2\text{CH}(\text{CH}_3)_2$	NX184M* *Methyl Ethyl Ketone Tube		0.01-1.2%	2	Fire hazard detection in paints industry & painting, mfg. artificial leather, plastic films, adhesives, recovery of acetic acid, industrial hygiene	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors except Halogenated hydrocarbons (50)	100
	NX147L* *Ethyl Acetate Tube		10-1000	1	Fire hazard detection in paints industry & painting	2	10	Other Esters, Ketones, Alcohols, Aromatic hydrocarbons, Paraffin hydrocarbons	
Isopropyl Alcohol (2-Propanol) $\text{CH}_3\text{CH}(\text{OH})\text{CH}_3$	NX155VH* *Ethylene Oxide Tube		0.05-2.5%	1	Fire hazard detection in paints industry & painting, mfg. pharmaceuticals, cosmetics, perfumes, inks, leather dyes, antifreezes, hydraulic brake fluids, metal decreasing & drying, hospitals, laboratories	3	10	Other Alcohols, Ketones, Esters, Aromatic hydrocarbons, Halogenated hydrocarbons (0.5%)	200 400 (UK)
	NX175		50-1200 20-480	① 2	Industrial hygiene	2	10	Other Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	
	NX148VVL* *Ethyl Alcohol Tube		20-300	1	Industrial hygiene	3	2x5	Alcohols, 1,3-Butadiene, Hydrogen Sulfide, Isobutylene, Acetone, n-Hexane, Ammonia	—
Isopropyl Alcohol $\text{CH}_3\text{CH}(\text{OH})\text{CH}_3$	NX302		600	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Isopropyl Cellosolve $(\text{CH}_3)_2\text{HCO}(\text{CH}_2)_2\text{COH}$	NX151* *Ethyl Cellosolve Tube		5-350	3		2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	25
Isopropyl Ether $(\text{CH}_3)_2\text{CHOCH}(\text{CH}_3)_2$	NX147L* *Ethyl Acetate Tube		30-800	1	Gunpowder, blast, dyestuff, solvent, detergent, mfg. rubber cement, lens	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	250 250 (UK)
Isopropyl Mercaptan $(\text{CH}_3)_2\text{CHSH}$	NX188L* *Methyl Mercaptan Tube		1.15-11.5 (0.575-5.75)	1/2 ①		2	10	Arsine, Hydrogen Selenide, H <sub>2</sub> S, HCN, PH <sub>3</sub>	—
Isopropylamine $(\text{CH}_3)_2\text{CHNH}_2$	NX141* *Diethyl-Amine Tube		1-12	1		3	10		5
Isovaleric Acid $(\text{CH}_3)_2\text{CHCH}_2\text{COOH}$	NX102* *Acetic Acid Tube		3-50	1	Artificial flavor, perfume and medical uses	3	10	SO <sub>2</sub> (1/20 x Acetic acid**) NO <sub>2</sub> (10), HCL (2 x Acetic acid**), Cl <sub>2</sub> (5)	—
Kerosene	NX302		0.1 mg/l	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Kerosene	NX160* *General Hydrocarbon Tube		0-16 mL/L	2	Industrial Hygiene	2	10	Aromatic Hydrocarbons, Alcohols, Esters, Ketones	—
Maleic Anhydride $\text{C}_4\text{H}_2\text{O}_3$	NX102* *Acetic Acid Tube		0.2-10	4	Material of polyester resin	3	10	SO <sub>2</sub> (1/20 x Acetic Acid**) NO <sub>2</sub> (10), HCL (2 x Acetic Acid**), Cl <sub>2</sub> (5)	0.01 mg/m3 1mg/m3 (UK)

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+ Air Flow Control Orifice is required





NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/ box	Interferences (ppm)	USA TLV ppm (UK) WELs
Mercury Vapor Hg	NX176		0.5-10 mg/m <sup>3</sup> 0.1-2.0 mg/m <sup>3</sup>	1 Ⓢ	Electrolytic soda industry, mfg. thermometer, fluorescent lamp	3	10	HCl (0.5), NO <sub>2</sub> (0.1), Cl <sub>2</sub> (0.1), H <sub>2</sub> S (0.5)	0.025mg/m3 0.02 mg/m3 (UK)
Mesityl Oxide (4-Methyl-3-penten-2- one) CH <sub>3</sub> COCH = C(CH <sub>3</sub> ) <sub>2</sub>	NX151* *Ethyl Cellosolve Tube		5-100	2	Industrial hygiene	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	15
Methacrylic Acid CH <sub>2</sub> = C(CH <sub>3</sub> )COOH	NX102* *Acetic Acid Tube		1-50	1	Mfg. soluble polymer	3	10	SO <sub>2</sub> (1/20 x Acetic Acid**), NO <sub>2</sub> (10), HCL (2 x Acetic Acid**), Cl <sub>2</sub> (5)	20 20 (UK)
1-Methoxy-2-Propanol CH <sub>3</sub> CHOHCH <sub>2</sub> OCH <sub>3</sub>	NX130* *Cyclohexa- none Tube		10-500	1	Solvent, ink, lacquer, cellulose, dyes, etc	3	10	Alcohols	50 100 (UK)
Methyl Acetate CH <sub>3</sub> CO <sub>2</sub> CH <sub>3</sub>	NX147M* *Ethyl Acetate Tube		0.1-3.0%	1	Fire hazard deflection in paints industry & painting, mfg. perfumes, dyes, synthetic finishes	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors, except Halogenated hydrocarbons	200 200 (UK)
Methyl Acrylate CH <sub>2</sub> = CHCO <sub>2</sub> CH <sub>3</sub>	NX177		2-60	2	Material of Acrylic resin, industrial hygiene	2	10	Alcohols, Esters, Paraffin hydrocarbons (over C <sub>3</sub> ), Aromatic hydrocarbons, Halogenated hydrocarbons	2 5 (UK)
Methyl Alcohol (Methanol) CH <sub>3</sub> OH	NX178H		0.05 -6.0%	1	Fire hazard detection in hospital & laboratory, pharmaceutical industry, paints industry & painting, mfg. printing inks, denatured-alcohol, antifreezes, perfumes & cosmetics, industrial hygiene	3	10	Paraffin hydrocarbons (over C <sub>3</sub> ), Alcohols, Esters, Aromatic hydrocarbons, Halogenated hydrocarbons	200 200 (UK)
	NX178L		20-1000	1		2	10	Alcohols, Esters, Aromatic hydrocarbons, Paraffin hydrocarbons, Halogenated hydrocarbons	
	NX148V VL* *Ethyl Alcohol Tube		20-300	1		3	2x5	Alcohols, 1,3 Butadiene, Hydrogen Sulfide, Isobutylene, Acetone, n-Hexane, Ammonia	—
Methyl Alcohol (Methanol) CH <sub>3</sub> OH	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Methanol in LP Gas	NX178SM		100 -1000 ppmv	1/2	Anti-freezing agent in LP gas	3	10		200 200 (UK)
Methylamine CH <sub>3</sub> NH <sub>2</sub>	NX179		1-20	1	Industrial hygiene	3	10	NH <sub>3</sub> , Other Amines	5
Methyl Amyl Ketone (2-Heptanone) CH <sub>3</sub> CO(CH <sub>2</sub> ) <sub>4</sub> CH <sub>3</sub>	NX184L* *Methyl Ethyl Ketone Tube		25 -350	3		2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	50
N-Methyl Aniline C <sub>6</sub> H <sub>5</sub> NHCH <sub>3</sub>	NX108VL* *Ammonia Tube		0.5 -6	2	Acid acceptor, solvent	3	10	Amines	0.5 0.5 (UK)

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NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/ box	Interferences (ppm)	USA TLV ppm (UK) WELs
Methyl Bromide (Bromomethane)  CH <sub>3</sub> Br	NX180H	R	10-500	1	Insect fumigation for mills, warehouses, ships, vaults, freight cars, concentration control in granary fumigation	3	2 x 5	Halogens, Halogenated hydrocarbons, Trichloroethylene (20), Tetrachloroethylene (40)	1 5 (UK)
	NX180M	R	2-80 1-25 0.4-10	① 2 4		3	2 x 5	Halogens, Halogenated hydrocarbons, Hexane (200)	
	NX180L		8.8-22 0.5-10 0.1-0.5	1/2 ① 3		1	2 x 5		
	NX180SVH		3-70 g/m3	1/2		2	2 x 10		
Methyl Tert-Butyl Ether	NX147L* *Ethyl Acetate Tube		25-500	1	Fuel, powder, blast cell, antiknock, solvent, detergent	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	50
Methyl Butyl Ketone CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> COCH <sub>3</sub>	NX220* *Vinyl Acetate Tube		5-80	2		2	10		5 5 (UK)
Methyl Cellosolve (Ethylene glycol monomethyl ether) (2-Methoxyethanol) CH <sub>3</sub> OCH <sub>2</sub> CH <sub>2</sub> OH	NX151* *Ethyl Cellosolve Tube		5-500	3	Organic solvent treating	2	10	Paraffin hydrocarbons (over C <sub>3</sub> ), Alcohols, Ketones, Aromatic hydrocarbons, Halogenated hydrocarbons, Esters	0.1 1 (UK)
Methyl Cellosolve Acetate CH <sub>3</sub> CO <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> OCH <sub>3</sub>	NX151* *Ethyl Cellosolve Tube		3-120	3		2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	0.1 1 (UK)
Methyl Chloroform (1,1,1-Trichloroethane) CH <sub>3</sub> CCl <sub>3</sub>	NX181	R	30-400 15-30	① 2	Metal decreasing & cleaning, extraction of oils & fats, paints industry, industrial hygiene	3	2 x 5	Halogens, Halogenated hydrocarbons	350 100 (UK)
Methyl Cyclohexane C <sub>6</sub> H <sub>11</sub> CH <sub>3</sub>	NX161M* *n-Hexane Tube		100-1600	1	Cellulose solvent	2	10	Paraffin, Aromatic Hydrocarbons, Alcohols (6%), Ketones (6%), Esters (6%)	400
Methyl Cyclohexanol CH <sub>3</sub> C <sub>6</sub> H <sub>10</sub> OH	NX182		5-200	3	Mfg. lubricating oil & liquor, industrial hygiene	2	10	Alcohols	50 50 (UK)
Methyl Cyclohexanone CH <sub>3</sub> C <sub>6</sub> H <sub>9</sub> O	NX183		2-100	3	Industrial hygiene	2	10	Alcohols	50 50 (UK)
Methyl Ethyl Ketone (2-Butanone) CH <sub>3</sub> COC <sub>2</sub> H <sub>5</sub>	NX155VH* *Ethylene Oxide Tube		1.0-5.0% 0.05-2.2%	1/2 ①	Process control, synthetic resins, solvent; solvent recovery control & fire hazard detection in paint industry & extraction of oils, fats, natural resins, waxes; cleaning & decreasing of metal surface, denaturization of alcohol	3	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons, Halogenated hydrocarbons (0.5%)	200 200 (UK)
	NX184M		0.01-1.4%	2		3	10	Other organic gases or vapors except Halogenated hydrocarbons (50), Acetylene (3%), Propane (0.2%)	
	NX184L		20-1500	1		2	10	Other Esters, Ketones, Alcohols, Aromatic hydrocarbons, Halogenated hydrocarbons, Paraffin hydrocarbons	

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+ Air Flow Control Orifice is required



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Methyl Ethyl Ketone CH <sub>3</sub> COC <sub>2</sub> H	NX302		100		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
Methyl Iodide (Iodomethane) CH <sub>3</sub> I	NX185VH		500-15000	1/2	Wood fumigation	3	10	1, 3-Dichloro-propene, Hydrogen Sulfide, Toluene	2 2 (UK)
	NX185L	R	2.5-50 1-20 0.4-8	1/2 ⊕ 2		1	10		
Methyl Isobutyl Ketone (Isopropyl acetone) (CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> COCH <sub>3</sub>	NX155VH* *Ethylene Oxide Tube		0.01-0.6%	3	Solvent for gums, resins, nitrocellulose	3	10	Alcohols, Other Ketones, Aromatic hydrocarbons, Esters, Halogenated hydrocarbons	20 50 (UK)
	NX186		5-300	1	Industrial hygiene	2	10	Alcohols, Esters, Aliphatic hydrocarbons (over C <sub>2</sub> ), Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	
Methyl Isobutyl Ketone (CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> COCH <sub>3</sub>	NX302		100		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
MITC (Methyl Isothiocyanate) CH <sub>3</sub> NCS	NX187H		200-10000	1	Wood fumigation	3	10		—
	NX187M		25-1500 10-600	1/2 ⊕		1	10		
	NX187L	R	0.66-22 0.3-10	1/2 ⊕	Soil fumigation	1	2x5	Carbon Dioxide	
Methyl Mercaptan (Methanethiol) CH <sub>3</sub> SH	NX188H		50-1000	1	Pesticides, fungicides, plastics, atmospheric pollution survey, concentration control of odorant	3	10	H <sub>2</sub> S (650), NO <sub>2</sub> (1000), Cl <sub>2</sub> (1/3 x CH <sub>3</sub> SH**)	0.5 0.5 (UK)
	NX188M		5-140	1		2	10	Cl <sub>2</sub> (0.2), Methyl Sulfide (1), Ethyl mercaptan, Acetylene, CO, H <sub>2</sub> S	
	NX188L		1-10 0.5-5	1/2 ⊕		2	10	Arsine, Hydrogen Selenide, H <sub>2</sub> S, HCN, PH <sub>3</sub>	
Methyl Mercaptan CH <sub>3</sub> SH	NX301		10		SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE				
	NX302		100		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
	NX302		20		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
Methyl Methacrylate CH <sub>2</sub> = C(CH <sub>3</sub> )CO <sub>2</sub> CH <sub>3</sub>	NX189		10-160	1	Pigment, adhesive, paintings	2	10	Esters, Ketones, Alcohols, Aromatic hydrocarbons	50 50 (UK)
Methyl Propyl Ketone CH <sub>3</sub> CO(CH <sub>2</sub> ) <sub>2</sub> CH <sub>3</sub>	NX184L* *Methyl Ethyl Ketone Tube		20-1500	1	Industrial hygiene	2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons, Halogenated hydrocarbons, Paraffin hydrocarbons	STEL 150
Methyl Styrene CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> CH = CH <sub>2</sub>	NX190		10-500	1	Synthetic resin	3	10	Styrene	10
Mineral Turpentine	NX147L* *Ethyl Acetate Tube		4-200		SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS				
Mineral Turpentine	NX160* *General Hydrocarbon Tube		0-30mL/L	2	Industrial Hygiene	2	10	Aromatic hydrocarbons, Alcohols, Esters, Ketones	—
Monoethanolamine (2-Aminoethanol) H <sub>2</sub> NCH <sub>2</sub> CH <sub>2</sub> OH	NX191		1-50 0.5-25	⊕ 2	Pesticide, solvent, detergent	2	10	Other Amines, NH <sub>3</sub> , Hydrazine	3 1 (UK)

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+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Morpholine C <sub>4</sub> H <sub>9</sub> NO	NX108VL* *Ammonia Tube		2-22	1	Solvent, rubber accelerator	3	10	Amines	20 10 (UK)
Naphthalene C <sub>10</sub> H <sub>8</sub>	NX171* *Isobutyl Acetate Tube		10-100	1	Industrial hygiene	1	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	10
Nickel Carbonyl (Nickel tetracarbonyl) Ni(CO) <sub>4</sub> Concentration chart method	NX192C		2-700	1	Waste gas analysis	1/2	10	Arsine, Iron Carbonyl, Mercury Vapor, H <sub>2</sub> S or SO <sub>2</sub> (10), CO (1,000)	C0.05
Nitric Acid Vapor HNO <sub>3</sub>	NX193	R	2-20 1-10	① 2	Industrial hygiene	1	10	HF (8) or NO <sub>2</sub> (50), HCl	2
Nitrogen Dioxide NO <sub>2</sub>	NX194H		20-1000	1	Arc welding, acid dipping, garage (diesel exhaust), waste gas analysis in sulfuric & nitric acid dipping of metal products	3	10	Cl <sub>2</sub> , Br <sub>2</sub> , I <sub>2</sub> or Ozone (5), NO (10)	0.2
	NX194M		0.5-30.0	2		1	10	Cl <sub>2</sub> , Br <sub>2</sub> , or I <sub>2</sub> (2), NO (15)	
	NX194L		0.1-1.0	3		1.5	2 x 5	O <sub>3</sub> (2), SO <sub>2</sub> (7), Cl <sub>2</sub> (3)	
Nitrogen Dioxide NO <sub>2</sub>	NX505		0.01-0.1 0.02-0.2	SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES					
Nitrogen Dioxide NO <sub>2</sub>	NX301		5	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
Nitrogen Oxide and Dioxide -separately measurable NO & NO <sub>2</sub> Concentration chart method	NX195C		NO: 10-300 NO <sub>2</sub> : 1-40	1	Industrial hygiene	2	5	Cl <sub>2</sub> (1)	NO: 25 NO <sub>2</sub> : 0.2
	NX195C2				Flue gas and exhaust gas analysis with hollow glass tubes		2 x 5		
Nitrogen Oxides NO + NO <sub>2</sub>	NX196H		100-2500	1	Exhaust gas analysis	2	10	HCl (500)	NO: 25 NO <sub>2</sub> : 0.2
	NX196M	R	20-250	1		1	10	SO <sub>2</sub> (100), HCl (1,000)	
	NX196L		1-30 0.5-15	1/2 ①	Industrial hygiene	3	10	H <sub>2</sub> S (5), HCl (500)	
n-Nonane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>7</sub> CH <sub>3</sub>	NX147L* *Ethyl Acetate Tube		10-160 5-80	1/2 1		2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	200
Octane	NX160* *General Hydrocarbon Tube		100-2800	1	Industrial hygiene	2	10	Aromatic hydrocarbons, Alcohols, Esters, Ketones	—
Oil Mist	NX803		0.3-5 mg/m <sup>3</sup>	SPECIALTY TUBE SEE TABLE 6: NEXTTEQ COMPRESSED BREATHING AIR DETECTOR TUBES					
Organic Acid	NX506		Acetic Acid; 10-400 µg/m <sup>3</sup> 25-1000 µg/m <sup>3</sup>	SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES					
			Formic Acid; 20-800 µg/m <sup>3</sup>	SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES					

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+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Organic Gas Checker	NX197C		-	1		3	10	H <sub>2</sub> S (10)	—
Oxygen-Non-heating Type O <sub>2</sub>	NX198		3-24% 1.5-3%	① 1	Oxygen deficiency in underground or closed vessels, tunnels and mines	2	2 x 5		—
Oxygen-Heating Type O <sub>2</sub>	NX198SA		2-24%	1/2	Oxygen deficiency in underground or closed vessels, tunnels, mines	2	5	CO <sub>2</sub> (5%), H <sub>2</sub> S (2%), NO <sub>2</sub> (2%), SO <sub>2</sub> (2%)	—
	NX198SB		2-24%	1/2	In an area where the danger of gas explosion exists	2	5		—
Oxygen O <sub>2</sub>	NX804		2-24%	SPECIALTY TUBE SEE TABLE 6: NEXTTEQ COMPRESSED BREATHING AIR DETECTOR TUBES					
Oxygen Carbon Dioxide-separation measurement O <sub>2</sub> & CO <sub>2</sub>	NX199		O <sub>2</sub> : 2-10%	1	Combustion control	1.5	2 x 5		CO <sub>2</sub> : 5000 5000 (UK)
			CO <sub>2</sub> : 1-20%						
Ozone O <sub>3</sub>	NX200H		100-1000 50-500	1/2 ①	Process control	2	10	Cl <sub>2</sub> , NO <sub>2</sub>	0.05
	NX200M		10-100 5-50 2.5-25	1/2 ① 2		2	10	NO <sub>2</sub> (10)	
	NX200L		0.15-3.0 0.05-1.0 0.025-0.5	1 ③ 6	Air pollution analysis, industrial hygiene	2	10	NO <sub>2</sub> (0.5), Cl <sub>2</sub> (10), Oxidant	
Paraquat Dichloride in blood qualitative CH <sub>3</sub> (C <sub>5</sub> H <sub>4</sub> N) <sub>2</sub> CH <sub>3</sub> Cl <sub>2</sub>	NX715		-	SPECIALTY TUBE SEE TABLE 3: NEXTTEQ CRIMINAL INVESTIGATION TUBES					
Pentane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub>	NX161M* *n-Hexane Tube		50-1000	1	Industrial hygiene	2	10	Paraffin hydrocarbons, Aromatic hydrocarbons (over C <sub>3</sub> ), Alcohols (6%), Ketones (6%), Esters (6%)	1000 600 (UK)
Pentane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub>	NX302		10	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Pentane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> CH <sub>3</sub>	NX160* *General Hydrocarbon Tube		40-1120	1	Industrial hygiene	2	10	Aromatic hydrocarbons, Alcohols, Esters, Ketones	—
Pentyl Acetate (Amyl acetate) CH <sub>3</sub> CO <sub>2</sub> (CH <sub>2</sub> ) <sub>4</sub> CH <sub>3</sub>	NX201		10-200	3	Material of Acrylic resin, industrial hygiene	2	10	Alcohols, Esters, Ketones, Aliphatic hydrocarbons, Aromatic hydrocarbons	50 50 (UK)
Pentylamine CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> CH <sub>2</sub> NH <sub>2</sub>	NX108VL* *Ammonia Tube		2-22	1	Dyes, insecticide, synthetic detergent, corrosion inhibitor, medicine, petrol additive	3	10	Amines	—
Phenol C <sub>6</sub> H <sub>5</sub> OH	NX202		0.5-25.0	2	Industrial hygiene	2	10	NH <sub>3</sub> (200), Aliphatic Amines (50), Phenols (2.5), Aromatic Amines (50)	5 2 (UK)
Phenol C <sub>6</sub> H <sub>5</sub> OH	NX302		10	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Phosgene (Carbonyl chloride) COCl <sub>2</sub>	NX203	R	0.5-20 0.1-4.0	① 5	Leakage detection in mfg. dyes, chemicals, industrial hygiene	1	10	Cl <sub>2</sub> (5), HCl (10), NO <sub>2</sub> (100), SO <sub>2</sub> (0.2%)	0.1 0.02 (UK)
Phosphine in Acetylene PH <sub>3</sub>	NX204SH +		20-800	1	Impurity test of calcium carbide & acetylene	3	10	Arsine or H <sub>2</sub> S (10)	0.05
	NX204SM +		5-90	1		3	10		0.1 (UK)

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**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Phosphine  PH <sub>3</sub>	NX204VH		400-6000 200-3000	1/2 ①	Fumigation of grains	3	10	Hydrogen cyanide (3%), Ammonia (0.6%)	0.05 0.1 (UK)
	NX204H		200-3200 100-1600	1/2 ①	Concentration control in fumigation of tobacco leaves & cereals, doping gas analysis in mfg. semiconductor, industrial hygiene	3	10	NO <sub>2</sub> , H <sub>2</sub> S, SO <sub>2</sub>	
	NX204MH		40-1400 20-700	1/2 ①		3	10	Arsine (30), Hydrogen Selenide (50), H <sub>2</sub> S (40)	
	NX204M		5-150	1		3	10	H <sub>2</sub> S (5), Hydrogen Selenide (5)	
	NX204LM		1-20.0 0.5-10.0 0.25-5.0	1/2 ① 2		1	10	NH <sub>3</sub> (20), Mercaptans, Hydrogen Sulfide (50)	
	NX204L		0.1-2.0 0.05-1.0	① 2		Industrial hygiene, semiconductor mfg. process	2	10	
Phosphine  PH <sub>3</sub>	NX301		2	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
α-Pinene  C <sub>10</sub> H <sub>16</sub>	NX210LM* *Styrene Tube		20-300	1	Materials for perfumes and medical material	3	10	Methanol (0.35%), Ethanol (0.18%), Ethyl Acetate (700), Butyl Acetate (700), Butadiene (5), Formaldehyde (15), Acetaldehyde (350), Acrylonitrile (400)	—
Propane  CH <sub>3</sub> CH <sub>2</sub> CH <sub>3</sub>	NX205		0.02-0.50%	1	Mfg. city gas, fire hazard detection	2	10	Toluene, Hexane, Trichloroethylene	—
Propane  CH <sub>3</sub> CH <sub>2</sub> CH <sub>3</sub>	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
1-Propanol  CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> OH	NX151* *Ethyl Cellosolve Tube		20-300	2		2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	100 200 (UK)
Propionic Acid  CH <sub>3</sub> CH <sub>2</sub> COOH	NX102* *Acetic Acid Tube		3-50	1	Mfg. propionate and ester, Nickel electroplating solution, ester perfume, artificial flavor, medicine, cellulose solvent	3	10	SO <sub>2</sub> (1/20 x Acetic Acid**), NO <sub>2</sub> (10), HCL (2 x Acetic Acid**), Cl <sub>2</sub> (5)	10 10 (UK)
Propyl Acetate  CH <sub>3</sub> CO <sub>2</sub> (CH <sub>2</sub> ) <sub>2</sub> CH <sub>3</sub>	NX184M* *Methyl Ethyl Ketone Tube		0.01-1.4%	2	Fire hazard detection in paints industry & painting, mfg. flavors & perfumes	3	10	Other organic gases or vapors except Halogenated hydrocarbons, Acetylene (3%), Propane (0.2%)	100 200 (UK)
	NX206		20-1000	1	Paints industry & painting, mfg. flavors & perfumes, industrial hygiene	2	10	Alcohols, Esters, Ketones, Paraffin hydrocarbons, Aromatic hydrocarbons	
Propylamine  CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub>	NX108VL* *Ammonia Tube		1-20	①	Analgesic	3	10	Amines	—
Propylene  CH <sub>2</sub> =CHCH <sub>3</sub>	NX207		50-1000	1	Leakage detection	2	10	CO (200), Acetylene (50), Ethylene, H <sub>2</sub> S (50)	500

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NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Propylene Glycol CH <sub>3</sub> CH(OH)CH <sub>2</sub> OH	NX155L* *Ethylene Oxide Tube		5-50	1	Mfg. moisturizer, lubricant, emulsifiers, antifreeze	2	2 x 5	Aldehydes, SO <sub>2</sub> , H <sub>2</sub> S	—
Propylene Oxide (1,2-Epoxypropane) CH <sub>3</sub> CHCH <sub>2</sub> O	NX208H		1.0-5.0% <u>0.05-3.0%</u>	1/2 ①	Leakage detection in preparation of propylene oxide	3	10	Aromatic hydrocarbons, Esters, Ketones, Alcohols, Halogenated hydrocarbons	2 5 (UK)
	NX155L* *Ethylene Oxide Tube		3-70	1		2	2 x 5	Aldehydes, SO <sub>2</sub> , H <sub>2</sub> S	
	NX208L	R	0.2-5.0	2		1	2 x 5	Formaldehyde	
n-Propyl Mercaptan CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> SH	NX188L* *Methyl Mercaptan Tube		1.15-11.5 0.575-5.75	1/2 1	Industrial hygiene	2	10	Arsine, Hydrogen Selenide, H <sub>2</sub> S, HCN, PH <sub>3</sub>	—
Pyridine C <sub>5</sub> H <sub>5</sub> N	NX108VL* *Ammonia Tube		0.5-10	1	Alcohol denaturant, solvent, paint, medical care, dye of fiber	3	10	Amines	1 5 (UK)
Salinity NaCl	NX405		0.01-0.8%	SPECIALTY TUBE SEE TABLE 7: NEXTTEQ DISSOLVED SUBSTANCE DETECTOR TUBES					
Silane SiH <sub>4</sub>	NX209	R	<u>1-50</u> 0.5-25	① 2	Industrial hygiene, semiconductor mfg. process	1	10	PH <sub>3</sub> (20), Arsine (50), Disilane (2), Diborane (20)	5 0.5 (UK)
Styrene C <sub>6</sub> H <sub>5</sub> CH=CH <sub>2</sub>	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Styrene (Vinyl Benzene) C <sub>6</sub> H <sub>5</sub> CH=CH <sub>2</sub>	NX210LM		<u>5-300</u> 2.5-150	① 2	Fire hazard detection in synthetic rubber, resin & plastic industry	3	10	Methanol (0.35%), Ethanol (0.18%), Ethyl Acetate (700), Butyl Acetate (700), Butadiene (5), Formaldehyde (15), Acrylonitrile (400), Acetaldehyde (350)	(20) 100 (UK)
	NX210L		<u>2-100</u> 1-50	② 4		3	2 x 5	Formaldehyde (15), Acetaldehyde (350), Acrylonitrile (400), Butadiene (5), Methanol (3500), Ethanol (1800), Ethyl Acetate (700) Butyl Acetate (700)	
Sulfur Dioxide SO <sub>2</sub>	NX211H		0.1-3.0%	1	Process control in sulfuric acid paint (chemical mfg.)	3	10	H <sub>2</sub> S (400)	STEL 0.25 0.5 (UK)
	NX211MH		0.02-0.3%	1	Process control in sulfuric ore calcination	3	10	H <sub>2</sub> S (100)	
	NX211M		20-300	1	Metal refining, mfg. sulfuric acid & nitric acid, waste gas analysis	2	10	Cl <sub>2</sub> (1/5 x SO <sub>2</sub> **), NO <sub>2</sub> (100), H <sub>2</sub> S (100 x SO <sub>2</sub> **)	
	NX211LM		1-60	1	Metal refining, mfg. sulfuric acid & nitric acid, industrial hygiene	3	10	NO <sub>2</sub> (1 x SO <sub>2</sub> **), Cl <sub>2</sub> (2 x SO <sub>2</sub> **)	
	NX211L	R	<u>0.5-10</u> 0.25-5	① 2	Metal refining, mfg. sulfuric acid & nitric acid, waste gas analysis	1	10	NO <sub>2</sub> , HCl	

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Sulfur Dioxide SO <sub>2</sub>	NX604		0.5-20	SPECIALTY TUBE SEE TABLE 4: NEXTTEQ TIME WEIGHTED AVERAGE DETECTOR TUBES					
Sulfur Dioxide -in flue gas SO <sub>2</sub>	NX211SF		0.02-0.3%	1	Flue gas analysis in heat power plant (with moisture control tube)	3	2 x 5	H <sub>2</sub> S (100)	STEL 0.25 0.5 (UK)
Sulfur Dioxide -in Carbon Dioxide SO <sub>2</sub>	NX211SB		0.5-25 0.1-3	① 4	Process control in beverage industry	3	10	NO <sub>2</sub> (0.5), H <sub>2</sub> S (0.5), NH <sub>3</sub> (1)	STEL 0.5 (UK)
Sulfur Dioxide SO <sub>2</sub>	NX301		10	SPECIALTY TUBE SEE TABLE 2: INORGANIC GAS QUALITATIVE DETECTOR TUBE					
Sulfuric Acid H <sub>2</sub> SO <sub>4</sub>	NX212		0.5-5 mg/m <sup>3</sup>	5	Petrochemical industry, industrial hygiene	2	10	HCl, HF, NO <sub>2</sub> , Nitric Acid, C <sub>12</sub>	0.05mg/m <sup>3</sup>
Sulfide Ion S <sup>2-</sup>	NX406H		2-1000	SPECIALTY TUBE SEE TABLE 7: NEXTTEQ DISSOLVED SUBSTANCE DETECTOR TUBES					
	NX406L		0.5-10	SPECIALTY TUBE SEE TABLE 7: NEXTTEQ DISSOLVED SUBSTANCE DETECTOR TUBES					
☆ 1,1,2,2-Tetrachloroethane CHCl <sub>2</sub> CHCl <sub>2</sub>	NX217*	*1,1,2-Trichloroethane tube	R	20-80	SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS				
Tetrachloroethylene (Perchloroethylene) Cl <sub>2</sub> C=CCl <sub>2</sub>	NX213H		0.2-2.0% 0.1-0.2%	① 2	Dry cleaning, metal decreasing, paints industry & painting, solvent recovery control	2	2 x 5	Trichloroethylene, 1, 1, 1-Trichloroethane, 1,2-Dichloroethylene, Vinyl Chloride, CO, Aromatic hydrocarbons	25 20 (UK)
	NX213M	R	125-1250 50-500	1/2 ①	Process control in dry cleaning industry	1	10	1,2-Dichloroethylene (10), Trichloroethylene (10)	
	NX213LM	R	10-300 5-150 2.1-21.0	1/2 ① 2	Dry cleaning, metal decreasing, paints industry & painting, solvent recovery control	2	10	Vinyl chloride, HCl, 1,2-Dichloroethylene, Trichloroethylene, Cl <sub>2</sub>	
	NX213L	R	1-10 0.2-2.0	① 4		1	10	Trichloroethylene, 1, 2-Dichloroethylene or HCl (2), Vinyl Chloride (40)	
Tetrachloroethylene Cl <sub>2</sub> C=CCl <sub>2</sub>	NX507		30-400 µg/m <sup>3</sup> 69-920 µg/m <sup>3</sup>	SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES					
Tetrachloroethylene Cl <sub>2</sub> C=CCl <sub>2</sub>	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Tetraethoxysilane Si(OC <sub>2</sub> H <sub>5</sub> ) <sub>4</sub>	NX214		12.5-200 5-80	1 ②	Industrial hygiene	3	10	Silane, Phosphine (5), Isopropyl Alcohol (7), Trichloroethylene, Tetrachloroethylene, Ethanol (10)	—

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required

☆The conversion charts and the measuring ranges may vary with each manufacturing lot.





NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Tetrahydrofuran (CH <sub>2</sub> ) <sub>4</sub> O	NX103H* *Acetone Tube		2.0-5.0% 0.2-3.0%	1/2 1	Fire hazard detection in paints industry & painting petrochemical industry, Industrial hygiene	3	10	Alcohols, Esters, Ketones, Aromatic hydrocarbon	50 50 (UK)
	NX215		20-400 5-100	⊕ 3		2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons, Halogenated hydrocarbons	
Tetrahydrofuran (CH <sub>2</sub> ) <sub>4</sub> O	NX302		100	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
Tetrahydrothiophene C <sub>4</sub> H <sub>8</sub> S	NX151* *Ethyl Cellosolve Tube		4-100	3	Odorant	2	10	Alcohols, Esters, Paraffin hydrocarbons, Aromatic hydrocarbons, Ketones, Halogenated hydrocarbons	—
Toluene (Methyl Benzene) C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	NX216H		100-3000	1	Solvent recovery control	2	10	Benzene, Xylene, Ethyl Benzene, Hexane, Methanol	20 50 (UK)
	NX216M		10-500	1	Solvent recovery control & fire hazard detection in paints industry & painting, rubber & plastics industry, mfg. dyes, printing inks, adhesives, industrial hygiene	3	10	Benzene (10), Xylene (50), Methanol (1%), Hexane (0.1%), Ethyl Benzene (10)	
Toluene (Methyl Benzene) C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	NX216L		2-100	1	Solvent recovery control	3	10	Aromatic hydrocarbons, Hexane (high conc.)	20 50 (UK)
Toluene C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	NX509	R	0.05-1.0	SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES					
Toluene C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	NX605		20-200	SPECIALTY TUBE SEE TABLE 4: NEXTTEQ TIME WEIGHTED AVERAGE DETECTOR TUBES					
Toluene C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	NX302		30	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
	NX302		200	SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE					
o-Toluidine C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> )(NH <sub>2</sub> )	NX108VL* *Ammonia Tube		2-22	1	Dyes, printing	3	10	Amines	2 0.2 (UK)
p-Toluidine C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> )(NH <sub>2</sub> )	NX108VL* *Ammonia Tube		2-20	1	Analytical reagent, dyes	3	10	Amines	2

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



**NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER**

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
1,1,1-Trichloroethane (Methyl chloroform) CH <sub>3</sub> CCl <sub>3</sub>	NX181	R	30-400 15-30	① 2	Metal decreasing & cleaning, extraction of oils & fats, paint industry, industrial hygiene	3	2 x 5	Halogens, Halogenated hydrocarbons	350 100 (UK)
1,1,1-Trichloroethane CH <sub>3</sub> CCl <sub>3</sub>	NX302		100		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
1, 1, 2-Trichloroethane Cl <sub>2</sub> CHCH <sub>2</sub> Cl	NX217	R	10-100	1	Industrial hygiene	1	3 x 5	Nitrogen Oxides, Halogens, Halogenated hydrocarbons, Hexane (100)	10
Trichloroethylene Cl <sub>2</sub> C = CHCl	NX302		10		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
Trichloroethylene Cl <sub>2</sub> C=CHCl	NX508		30- 400 µg/m <sup>3</sup> 69 -920 µg/m <sup>3</sup>		SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES				
Trichloroethylene Cl <sub>2</sub> C = CHCl	NX218H		0.05-2.0%	1	Metal decreasing & cleaning, dry cleaning & insect fumigation of clothes, mfg. printing inks, industrial hygiene	2	10	Tetrachloroethylene, 1, 1, 1-Trichloroethane, 1, 2-Dichloroethylene, Vinyl Chloride, CO, Aromatic hydrocarbons	10 (UK)
	NX218M	R	10-300 5-150	1/2 ①		2	10	Vinyl chloride, HCl, 1, 2-Dichloroethylene, Tetrachloroethylene, Cl <sub>2</sub>	
	NX218L	R	2.3-36.8 1-16 0.2-3.2	1/2 ① 4		1	10	Tetrachloroethylene, 1, 2-Dichloroethylene or HCl (2), Vinyl Chloride (20)	
Trichlorotoluene C <sub>6</sub> H <sub>5</sub> CCl <sub>3</sub>	NX221L* *Vinyl Chloride Tube		0.2-4.0		SPECIALTY TUBE SEE TABLE 1: STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS				
Triethylamine (C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> N	NX219		2-20 1-10 0.5-2	1/2 ① 2	Mfg. emulsifier, organic solvent, waterproofing agent, dyestuff, surface activator and agricultural chemicals etc., industrial hygiene	3	10	NH <sub>3</sub> , Other Amines	0.5 2 (UK)
Trimethylamine (CH <sub>3</sub> ) <sub>3</sub> N	NX108L* *Ammonia Tube		5-100 2.5-50 0.5-10	1/2 1 5		3	10	Sulfur Dioxide, Chlorine, Amines	5
	NX141* *Diethyl Amine Tube		1-20	1	Industrial hygiene	3	10	NH <sub>3</sub> , Other Amines	
1, 2, 4-Trimethyl Benzene C <sub>6</sub> H <sub>3</sub> (CH <sub>3</sub> ) <sub>3</sub>	NX147L* *Ethyl Acetate Tube		20-250	1		2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	25 25 (UK)
2, 2, 4-Trimethyl Pentane (CH <sub>3</sub> ) <sub>3</sub> CCH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	NX161M* *n-Hexane Tube		200-4000 100-1400	1/2 ①	Automotive fuel	2	10	Paraffin hydrocarbons, Aromatic hydrocarbons, Alcohols (6%), Ketones (6%), Esters (6%)	—
n-Undecane CH <sub>3</sub> (CH <sub>2</sub> ) <sub>9</sub> CH <sub>3</sub>	NX147L* *Ethyl Acetate Tube		10-140	1		2	10	Alcohols, Esters, Ketones, Aromatic hydrocarbons	—
n-Valeric Acid CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> CO <sub>2</sub> H	NX102* *Acetic Acid Tube		3-70	1	Artificial flavor, perfume, lubricant, plasticizer, medicine	3	10	SO <sub>2</sub> (1/20 x Acetic Acid**), NO <sub>2</sub> (10), HCL (2 x Acetic Acid**), Cl <sub>2</sub> (5)	—

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING IN ALPHABETICAL ORDER

Gas to be measured (Synonym) Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Typical Applications	Shelf Life (year)	Qty of tubes/box	Interferences (ppm)	USA TLV ppm (UK) WELs
Vinyl Acetate CH <sub>3</sub> CO <sub>2</sub> CH = CH <sub>2</sub>	NX220		10-120 5-60	① 2	Process control in Acetylene plant	2	10	Ethylene (150), Alcohols, Ethers, Esters	10 5 (UK)
Vinyl Chloride CH <sub>2</sub> = CHCl	NX302		10		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
Vinyl Chloride (Chloroethylene) CH <sub>2</sub> = CHCl	NX221H		0.05 -1.0%	1	Leakage & fire hazard detection in PVC plant, industrial hygiene	3	10	Acetylene (3%), Propane (0.2%), Other organic gases or vapors except Halogenated hydrocarbons (50)	1 3 (UK)
	NX221M	R	5-500	1	Process control, leakage detection and fire hazard detection in synthetic rubber & plastics industry	1.5	2 x 5	Cl <sub>2</sub> , HCl, Other Halogens, Halogenated hydrocarbons	
	NX221L		0.4-12.0 0.2-6.0 0.1-3.0	1 ② 4	Industrial hygiene	3	2 x 5	HCl (500), Acetylene (1%), Ethylene (300), Cl <sub>2</sub> (50)	
Water content in solvent H <sub>2</sub> O	NX407		10-160 mg/L 50-400 mg/L		Detection of water content in solvent	2	10		—
Water Vapor H <sub>2</sub> O	NX805		20-160 mg/m <sup>3</sup>		SPECIALTY TUBE SEE TABLE 6: NEXTTEQ COMPRESSED BREATHING AIR DETECTOR TUBES				
Water Vapor H <sub>2</sub> O	NX222M		1.7-33.8 mg/L	1	Industrial hygiene, process control	3	10	Methanol (0.3%), Ethanol (0.3%), Ethyl Acetate (0.3%), Acetone (0.5%), NH <sub>3</sub> (0.02%), NO <sub>2</sub> (0.2%)	—
	NX222L		0.05-2.0 mg/L	1		3	10	Alcohols	
	NX222PH		3-80 LB/MMCF	1	Petrochemical industry, industrial hygiene	3	10		
Water Vapor H <sub>2</sub> O	NX222PL		2-12 LB/MMCF	2		3	10	Alcohols	
	NX222PM		4.2-25.2 LB/MMCF 2-12 LB/MMCF	1 ②	3	10			
Xylene (Dimethyl Benzene) C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	NX223LM		5-1000	2	Leakage & fire hazard detection in phthalic acid plant, paints industry & painting, mfg. dyes, adhesives, printing inks, cleaning fluids, industrial hygiene	1.5	10	Benzene, Toluene, Ethyl Benzene, Methanol (1%), Hexane (0.1%)	100 50 (UK)
	NX223L		5-200	2		2	10	Toluene (1/5 x Xylene)	
Xylene C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	NX509* *Toluene Tube	R	0.1-1.4		SPECIALTY TUBE SEE TABLE 5: NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES				
Xylene C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	NX302		60		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				
	NX302		1000		SPECIALTY TUBE SEE TABLE 2: ORGANIC GAS QUALITATIVE DETECTOR TUBE				

\*\*Interference from the listed substance will occur at concentrations above the levels listed in parentheses

+ Air Flow Control Orifice is required



NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES  
TABLE 1

NEXTTEQ STANDARD DETECTOR TUBES THAT UTILIZE SPECIAL CONVERSION CHARTS

Conversion charts are available, upon request and as disclaimed in the Nextteq Gas Detector Tube Handbook, for the following listed chemical substances using existing detector tubes within the Nextteq range. These conversion charts are for use in a temperature of 20°C/68°F. Other conditions, such as different temperatures, humidity and coexisting gases, are not confirmed. Please specify the name of the substance to be measured together with the tube number when ordering.

Gas to be measured Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. of Pump Strokes	Shelf Life (year)	Qty of tubes/box	ACGIH TLV (UK) WELs
Allyl Chloride $\text{CH}_2=\text{CHCH}_2\text{Cl}$	NX221L		1-40	3	3	2×5	1
Benzyl Chloride $\text{C}_6\text{H}_5\text{CH}_2\text{Cl}$	NX221L		1-16	1	3	2×5	1 0.5 (UK)
1-Bromopropane $\text{CH}_3\text{CH}_2\text{CH}_2\text{Br}$	NX180H	R	10-500	1	3	2×5	0.1
2-Bromopropane $(\text{CH}_3)_2\text{CHBr}$	NX180H	R	10-500	1	3	2×5	0.1
m-Chlorotoluene $\text{C}_6\text{H}_4\text{Cl}(\text{CH}_3)$	NX221L		0.5-10	2	3	2×5	–
o-Chlorotoluene $\text{ClC}_6\text{H}_4\text{CH}_3$	NX221L		1-50	2	3	2×5	50
p-Chlorotoluene $\text{ClC}_6\text{H}_4\text{CH}_3$	NX221L		1-50	2	3	2×5	–
p-Cymene $\text{CH}_3\text{C}_6\text{H}_4\text{CH}(\text{CH}_3)_2$	NX103L		20-200	1	2	10	–
1,1-Dichloroethylene $\text{CH}_2=\text{CCl}_2$	NX221L		1-22	1	3	2×5	5
Disilane $\text{Si}_2\text{H}_6$	NX209	R	1-50	1	1	10	–
Ethylene Chlorohydrine $\text{ClCH}_2\text{CH}_2\text{OH}$	NX178L		5-300	3	2	10	C1
Iodine $\text{I}_2$	NX194M		0.7-42	1	1	10	0.01
Mineral Turpentine –	NX147L		4-200	1	2	10	100
Trichlorotoluene $\text{C}_6\text{H}_5\text{CCl}_3$	NX221L		0.2-4.0	1	3	2×5	–
☆Benzaldehyde $\text{C}_6\text{H}_5\text{CHO}$	NX151		5-70	3	2	10	–
☆1,1,2,2-Tetrachloroethane $\text{CHCl}_2\text{CHCl}_2$	NX217	R	20-80	3	1	3×5	1

☆ The conversion charts and the measuring ranges may vary with each manufacturing lot.



NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES  
TABLE 2

INORGANIC GAS QUALITATIVE DETECTOR TUBE  
Tube No. NX301



Section	Original Color
A	Pale purple
B	Reddish purple
C	White
D	White
E	Yellow

**1. PERFORMANCE**

- 1) Substances to be detected : Acetic acid, Amines, Ammonia, Carbon Monoxide, Chlorine, Hydrogen Chloride, Hydrogen Sulfide, Nitrogen Dioxide, Phosphine, Sulfur Dioxide, Acetylene and Methyl Mercaptan (Organic Gas)
- 2) Tube per box : 10 tubes (10-time use)
- 3) Pump stroke : 1 (100 mL)
- 4) Sampling time : 20 seconds
- 5) Shelf life : 1 year
- 6) Operating temperature : 0~40°C
- 7) Color change : Refer to the "INORGANIC GAS QUALITATIVE DETECTION CHART"
- 8) Non-discoloration : Carbon Dioxide, Hydrogen Cyanide, Nitric Oxide and confirmed substances : Ethylene (Organic gas)

INORGANIC GAS QUALITATIVE DETECTION CHART

Selection (Original Color)					Substances(*1)
A (Pale purple)	B (Reddish purple)	C (White)	D (White)	E (Yellow)	
Yellow	—	—	—	—	1) Ammonia (5) 2) Amines (5) 3) Hydrazine (5)
—	Yellow	—	—	—	4) SO <sub>2</sub> (10) 5) Acetic Acid (15)
	Pink	—	—	—	6) Hydrogen Chloride (20)
	White	Yellowish orange	—	—	7) Chlorine (5)
	—	Yellow	—	—	8) Nitrogen Dioxide (5)
—	—	—	Brown	—	9) H <sub>2</sub> S (10)
		—	—	Pale blackish brown	10) CO (10)
		—	—	Dark black	11) Phosphine (2)
		—	—	Pale yellowish green	12) Acetylene (10)
—	—	—	—	Dark yellow	13) Methyl Mercaptan (10)

**NOTES:**

- (1) – Undiscolored
- (2) (\*1) – Detectable gas concentration limit of the substance (Unit: ppm)
- (3) Substance No.5), 12) and 13) are organic substances.



NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES  
TABLE 2 CONTINUED

ORGANIC GAS QUALITATIVE DETECTOR TUBE  
Tube No. NX302



Section	Original Color
A	Orange
B	White
C	Yellow
D	Yellow

**PERFORMANCE**

- 1) Substances to be detected : Acetaldehyde, Acetone, Acetylene, Aniline, Benzene, 1,3-Butadiene, Butane, 1-Butanol, Butyl Acetate, Carbon Disulfide, Cresol, Ethyl Acetate, Ethylamine, Ethyl Benzene, Ethyl Cellosolve, Ethylene, Ethylene Oxide, Formaldehyde, Gasoline, Heptane, Hexane, Isopropyl Alcohol, Kerosine, Methyl Alcohol, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, Methyl Mercaptan, Pentane, Phenol, Propane, Styrene, Tetrachloroethylene, Tetrahydrofuran, Toluene, 1,1,1-Trichloroethane, Trichloroethylene, Vinyl Chloride, Xylene, Arsine, Carbon Monoxide and Hydrogen Sulfide ( : Inorganic Gas)
- 2) Tube per box : 10 tubes (5-time use)
- 3) Pump stroke : 1 (100 mL) +1 (100 mL)
- 4) Sampling time : 30+30 seconds
- 5) Shelf life : 2 years
- 6) Operating temperature : 0~40°C
- 7) Color change : Refer to "ORGANIC GAS QUALITATIVE DETECTION CHART"
- 8) Non-discoloration : Acetic Acid, Carbon Tetrachloride, Methane, Methyl Bromide and Pyridine confirmed substances

ORGANIC GAS QUALITATIVE DETECTION CHART

"A" side sampling	"D" side sampling				1) Substances -*2(X) - -*3(X/Y) -
Selection	Selection				
A (Orange)	A (Orange)	B (White)	C (Yellow)	D (Yellow)	
Dark brown	Dark brown	—	—	—	1) Propane (100) 2) Butane (10) 3) Pentane (10) 4) Hexane (10) 5) Trichloroethylene (10) 6) Tetrachloroethylene (100) 7) Vinyl Chloride (10)
			White	—	8) 1,3 - Butadiene (100)
	Greenish brown	—	Pale blue	—	9) Gasoline (0.1mg/L)



NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES

TABLE 2 CONTINUED

ORGANIC GAS QUALITATIVE DETECTION CHART

"A" side sampling	"D" side sampling				1) Substances - <sup>2</sup> (X) - - <sup>3</sup> (X/Y) -
Selection	Selection				
A (Orange)	A (Orange)	B (White)	C (Yellow)	D (Yellow)	
Dark brown	—	Pale brown	—	—	10) Benzene (10/100) 11) Toluene (30/200) 12) Xylene (60/1,000) 13) Ethyl Benzene (60/400)
		—	Pale blue	—	14) Ethylene (10) 15) Acetylene (1000/100)
			Yellowish orange	—	16) Styrene (100)
			—	—	17) Acetone (600) 18) Methyl Ethyl Ketone (100) 19) Ethyl Acetate (600) 20) Butyl Acetate (100) 21) Ethylene Oxide (100) 22) Formaldehyde (10) 23) Kerosene (0.1mg/L)
Greenish brown	Greenish brown	—	—	—	24) Heptane (10) 25) Carbon Disulfide (100)
	—	—	Yellowish orange	—	26) Methyl Mercaptan (100/20)
Greenish brown	—	—	—	—	27) Methyl Alcohol (100) 28) 1-Butanol (100) 29) Acetaldehyde (100) 30) Methyl Isobutyl Ketone (100) 31) Ethyl Cellosolve (100) 32) Tetrahydrofuran (100) 33) 1,1,1-Trichloroethane (1000)
			—	—	—
Pale brown	—	—	Black	—	36) Isopropyl Alcohol (600)
			—	—	—
—	—	—	Pale blue	—	38) Phenol (10) 39) Cresol (20)
			—	Pale brown	40) Aniline (40)
			—	Pale blue	41) Ethylamine (100)

NOTES: -

(1) — Undiscolored

(2) <sup>2</sup> (X) : Detectable gas concentration limit of the substance (Unit: ppm)

<sup>3</sup> (X/Y) : "X" means detectable gas concentration limit (Unit: ppm) of

"A" side sampling and "Y" means detectable concentration limit of "D" side sampling.

(3) Substance No.34, 35) and 37) are inorganic gases.



NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES  
TABLE 3

NEXTTEQ CRIMINAL INVESTIGATION TUBES (FOR SCREENING TEST ONLY)

Gas to be measured Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	No. Pump Strokes	Typical Applications	Sampling Method	Shelf Life (year)	Qty of tubes/box
Gasoline / Kerosene (Qualitative)	NX701		–	1	Discriminate Gasoline and/or Kerosene	Vacuum method	2	10
Gasoline / Kerosene (Qualitative)	NX702		–	1			2	10
Hydrogen Cyanide in blood HCN	NX713 +	R	2-30mg/L	1		Vacuum method	2	2×5
Carbon Monoxide in blood CO	NX711 +		20-90%COHb	1			1	2×5
Ethyl Alcohol in blood C <sub>2</sub> H <sub>5</sub> OH	NX712 +		0.2-2.0mg/mL	3	Screening test to identify cause of one's death		1	2×5
Hydrogen Sulfide in blood H <sub>2</sub> S	NX714 +	R	0.1-1.0µg/mL	1			1	2×5
Paraquat Dichloride in blood -qualitative CH <sub>3</sub> (C <sub>5</sub> H <sub>4</sub> N) <sub>2</sub> CH <sub>3</sub> Cl <sub>2</sub>	NX715		–	–		Injection method	3	10

+ Air flow control orifice is required.

TLV-TWA (The Threshold Limit Value-Time Weighted Average): The time-weighted average concentration for an 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect.





NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES  
TABLE 4

NEXTTEQ TIME WEIGHTED AVERAGE DETECTOR TUBES

Gas to be measured Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	Sampling		Shelf Life (year)	Qty of tubes/ box	T.L.V. T.W.A (ppm) USA UK
				Flow Rate (mL/min)	Time (hr)			
Ammonia NH <sub>3</sub>	NX601		5-200	6	0.5-8	3	10	25 30 (UK)
Carbon Monoxide CO	NX602		5-400	8	1-8	3	10	25 (UK)
Hydrogen Sulfide H <sub>2</sub> S	NX603		1-20	6	1-8	1	10	1 5 (UK)
Sulfur Dioxide SO <sub>2</sub>	NX604		0.5-20	6	1-8	3	10	0.25
Toluene C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	NX605		20-200	10	1-8	3	10	20 50 (UK)

**Nextteq NX-300 - Constant Flow Air Sampling Pump**

Compact, Pocket-sized and Low Flow

The NX-300 diaphragm pump with a constant flow rate of 10-300 mL/min is designed for use with the Nextteq line of Time Weighted Average tubes or for other applications where a low flow rate is needed. With a flow rate precision of ±5% or ±5 mL/min (whichever is greater) and an operating time of over 10 hours on one set of AA batteries, the lightweight pump (<7 oz) with an Organic LED display is ideal for doing personal or area monitoring in the workplace. The pump also has the capability of being powered by an external source using a 5V DC micro USB cord and can sample using a manual timer, an interval timer or by total volume.

Features and benefits:

- 10-hour run time on two AA alkaline batteries.
- No tools needed to change flow rate.
- Organic LED display allows operation in low-light conditions.
- Built-in pressure loss correction function that suppresses flow rate fluctuations.
- USB port for use with an external power source.
- Battery status display.
- Port filter element to prevent intake of foreign objects.
- Included low flow rate orifice for flow rates from 10-50 mL/min.
- Delay timer for sampling start.
- Sampling stop time either manually, by preset run time, or preset total volume.
- Key pad lock system.
- Durable ABS/polycarbonate pump housing.
- One year warranty.



NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES  
TABLE 5

NEXTTEQ HIGH SENSITIVITY DETECTOR TUBES

Gas to be measured Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	Sampling		Typical Applications	Shelf Life (year)	Qty of tubes/box
				Flow Rate (mL/min)	Time (hr)			
Formaldehyde HCHO	NX503L	R	0.01-0.12 0.04-0.48	300	30 10	Indoor air pollutants	1	20
	NX503M	R	0.05-1.0 0.10-2.0	300	30 15		1	20
	NX503H	R	0.01-0.50	350	10		1	20
Toluene C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	NX509	R	0.05-1.0	200	20		1	2 x 10
Ethyl Benzene C <sub>6</sub> H <sub>4</sub> (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub>	NX509* *Toluene Tube	R	0.05-1.2				1	2 x 10
Xylene C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	NX509* *Toluene Tube	R	0.1-1.4				1	2 x 10
p-Dichlorobenzene p-C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub>	NX502		0.01-0.40				200	15
Nitrogen Dioxide NO <sub>2</sub>	NX505		0.01-0.1 0.02-0.2	200	20 10	Atmospheric environment measurement	2	10
Trichloroethylene Cl <sub>2</sub> C = CHCl	NX508		30-400 µg/m <sup>3</sup> 69-920 µg/m <sup>3</sup>	100	30 15		1	2 x 10
Tetrachloroethylene Cl <sub>2</sub> C = CCl <sub>2</sub>	NX507		30-400 µg/m <sup>3</sup> 69-920 µg/m <sup>3</sup>	100	30 15		1	2 x 10
Hydrogen Fluoride HF	NX504		0.05-1.0	250	10	Industrial hygiene	1	10
Ammonia NH <sub>3</sub>	NX501H		10-80 µg/m <sup>3</sup>	400	60	For cultural property in art galleries and museums	2	10
	NX501L		1-12 µg/m <sup>3</sup>	400	60	For clean room monitoring of semiconductor industries		
Organic Acid	NX506		Acetic Acid: 10-400 µg/m <sup>3</sup> 25-1000 µg/m <sup>3</sup>	200	60 30	For cultural property in art galleries and museums	3	10
			Formic Acid: 20-800 µg/m <sup>3</sup>	200	60			

**Nextteq NX-1200 - Constant Flow Air Sampling Pump**

Specifically designed for Indoor Air Quality

The Nextteq NX-1200 Air Sampler is designed to be used with detector tubes or sorbent tubes for measuring gases in working, indoor, or atmospheric environments. With a flow rate from 10-1200 mL/min (constant flow) and an accuracy of ±5 mL/min, it can also be used as an area monitoring pump by using the convenient tripod attachment on the bottom. The pump is light and compact with enhanced dustproof and waterproof capabilities with an IEC protection rating of IP54, meaning it is protected from dust and splashing water during normal operation. It also allows for versatility of power sources and can be powered with 4 AA batteries (alkaline, nickel metal hydride, or lithium) or AC power with the included power cord.

Features and benefits:

- 12-hour run time on four AA alkaline batteries.
- AC Adaptor using USB connection.
- No tools needed to change flow rate.
- Large back-lit display allows operation in low-light conditions.
- Built-in pressure loss correction function that suppresses flow rate fluctuations.
- Battery status display.
- Port filter element to prevent intake of foreign objects.
- Delay timer for sampling start.
- Sampling stop time either manually, by preset run time, or preset total volume.
- Key pad lock system.
- One year warranty.
- Lightweight – approx. 490 grams.



NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES  
TABLE 6

**NEXTTEQ COMPRESSED BREATHING AIR DETECTOR TUBES**

Gas to be measured Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	Sampling Time (min)	Shelf Life (year)	Qty of tubes/box
Carbon Dioxide CO <sub>2</sub>	NX801		100-3000	2	2	10
Carbon Monoxide CO	NX802		5-100 2.5-5	② 4	2	10
Oil Mist	NX803		0.3-5mg/m <sup>3</sup>	25	2	10
Oxygen O <sub>2</sub>	NX804 *		2-24%	1	2	10
Water Vapor H <sub>2</sub> O	NX805		20-160mg/m <sup>3</sup>	1	3	10

\* To prevent influence by ambient oxygen, an O<sub>2</sub> Airteq Sampling Apparatus Kit is required. (syringe, shut off valve, and tubing) P/N NX90183  
Please contact Nextteq International customer service at (877) 312-2333 for assistance.

Nextteq Airteq Kits, for Nextteq Airteq detector tubes, provide a simple method for detecting contaminants in compressed gas and supplied air. With no batteries or electric power required, the portable kits are intrinsically safe and can be used anytime, anywhere.

**Nextteq Standard Airteq Regulator Kit**

**P/N NX90157**

Contains: Airteq Regulator Assembly, Manual and Tube Holder.

**Nextteq Deluxe Airteq Regulator Kit**

**P/N NX90158**

Contains: Airteq Regulator Assembly, Manual, Tube Holder, Carrying Case, and the following 5 Airteq compressed breathing air detector tubes: NX801, NX802, NX803, NX804, NX805.



NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES  
TABLE 7

NEXTTEQ DISSOLVED SUBSTANCE DETECTOR TUBES

Gas to be measured Chemical Formula	Tube No.	Storage	Measuring Range(s) (ppm)	Sampling		Sampling Method	Shelf Life (year)	Qty of tubes/box
				Volume (mL)	Time (sec)			
Chloride Ion Cl <sup>-</sup>	NX401H		10-2000	over 5.0	90	Immersion Method	3	10
	NX401M		3-200	over 5.0	90		2	10
	NX401L		1-60	over 5.0	180		2	10
Chlorine Free residual Cl <sub>2</sub>	NX404		0.4-5	over 5.0	180	Immersion Method	2	10
Copper Ion Cu <sup>+</sup>	NX402		1-100mg/L	over 5.0	60	Direct Sampling Method ■	1	10
Cyanide Ion CN <sup>-</sup>	NX403		0.2-5	over 5.0	120 to 240	Direct Sampling Method ■	2	10
Salinity NaCl	NX405		0.01-0.8%	over 5.0	30	Direct Sampling Method ■	2	10
Sulfide Ion S <sub>2</sub>	NX406H		2-1000	over 5.0	180	Immersion Method	1	10
	NX406L		0.5-10	over 5.0	150		2	10
Water content in solvent H <sub>2</sub> O	NX407		10-160mg/L 50-400mg/L	Position C	10	Direct Sampling Method ■	2	10
				D	10			

■ Rubber bulb is required.

**Nextteq Detector Tubes for Dissolved Substances in Solutions**

**One Way Aspirating Bulb**

**P/N 90005**

Fast and economical on-the-spot detection of trace chemicals in liquids. Several applications, including chromium (VI) ion, mercury, and sulfide ion. Results are available in minutes.



NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES  
TABLE 8

The following is a list of the Nextteq detector tube applications by part number which have been tested and authorized to use with Nextteq 20-meter extension hose P/N NX90148 and NX90149 along with their associated correction information.

TUBE NO.	GAS TO BE MEASURED	SAMPLING TIME/100 mL (SAMPLING TIME/50 mL)	CORRECTION FACTOR
NX198SA	Oxygen	4 minutes	1.25
NX211M	Sulfur Dioxide	2 minutes	1
NX211LM	Sulfur Dioxide	2 minutes	1
NX211SB	Sulfur Dioxide	4 minutes	1
NX117M	Carbon Dioxide	7 minutes (5 minutes)	1
NX117VVL	Carbon Dioxide	3 minutes (1.5 minutes)	1
NX117H	Carbon Dioxide	2.5 minutes	1
NX194H	Nitrogen Dioxide	3 minutes	1.15
NX196M	Nitrogen Oxides	2 minutes	1.25
NX196H	Nitrogen Oxides	1.5 minutes	1.35
NX196L	Nitrogen Oxides	2 minutes (1 minute)	1.4
NX108MH	Ammonia	2 minutes	1
NX108L	Ammonia	2 minutes (1 minute)	1
NX108VVH	Ammonia	2 minutes	1
NX119H	Carbon Monoxide	4 minutes	1.25
NX119L	Carbon Monoxide	6 minutes	1.3
NX119M	Carbon Monoxide	2 minutes	1.45
NX119VVH	Carbon Monoxide	3 minutes	1.7
NX169M	Hydrogen Sulfide	2.5 minutes	1
NX169MH	Hydrogen Sulfide	1.5 minutes	1.3
NX169VL	Hydrogen Sulfide	2 minutes (1.5 minutes)	1.15
NX169M	Hydrogen Sulfide	2 minutes (1.5 minutes)	1.1
NX169H	Hydrogen Sulfide	2 minutes (1 minute)	1
NX169VVL	Hydrogen Sulfide	2 minutes (1 minute)	1.1
NX188L	Mercaptans	2 minutes (1.5 minutes)	1.1
NX188M	Methyl Mercaptan	2 minutes	1
NX156MH	Ethyl Mercaptan	2 minutes	1
NX205	Propane	6 minutes	1.45
NX159	Gasoline	2 minutes	1.25
NX160	Hydrocarbon	3.5 minutes	1
NX161H	n-Hexane	2 minutes	1.25
NX161M	n-Hexane	3.5 minutes	1
NX113H	1,3 Butadiene	2 minutes	1
NX128	Cyclohexane	2 minutes	1.2
NX114	n-Butane	6 minutes	1.15
NX130	Cyclohexanone	2 minutes	1.1



NEXTTEQ SPECIALTY DETECTOR TUBE APPLICATION TABLES  
TABLE 8 CONTINUED

TUBE NO.	GAS TO BE MEASURED	SAMPLING TIME/100mL (SAMPLING TIME/50 mL)	CORRECTION FACTOR
NX111VH ♦	Benzene	4 minutes	1.6
NX111M	Benzene	3 minutes	1.3
NX111L ♦	Benzene	4 minutes	1.05
NX111H ♦	Benzene	3 minutes	1.2
NX216M	Toluene	3 minutes	1.35
NX216L	Toluene	3 minutes	1.3
NX216H	Toluene	2.5 minutes	1.35
NX223LM	Xylene	3 minutes	2
NX223L	Xylene	3 minutes	1.9
NX109	Aniline	1 minute	1.6
NX124 ♦	Chlorobenzene	4 minutes	1.2
NX210LM	Styrene	1.5 minutes	1.5
NX210L ♦	Styrene	1.5 minutes	1.5
NX148L	Ethanol	2 minutes	1.1
NX178L	Methanol	3 minutes	1
NX175	Isopropyl Alcohol	3 minutes	1
NX172	Isopropyl Alcohol	2.5 minutes	1
NX129	Cyclohexanol	2.5 minutes	1.15
NX154M ♦	Ethylene Glycol	2 minutes	1
NX154L ♦	Ethylene Glycol	2 minutes	1
NX151	Ethyl Cellosolve	2.5 minutes	1.1
NX103L	Acetone	3 minutes	1
NX184L	Methyl Ethyl Ketone	3 minutes	1
NX184M	Methyl Ethyl Ketone	2.5 minutes	1.15
NX186	Methyl Isobutyl Ketone	3 minutes	1.15
NX157M ♦	Formaldehyde	1.5 minutes	1.2
NX147L	Ethyl Acetate	3 minutes	1
NX177	Methyl Acrylate	3 minutes	1.25
NX189	Methyl Methacrylate	3 minutes	1.15
NX218M	Trichloroethylene	3 minutes (1.5 minutes)	1
NX213LM	Tetrachloroethylene	3 minutes (1.5 minutes)	1
NX125 ♦	Chloroform	4 minutes	0.85
NX107L ♦	Acrylonitrile	2.5 minutes 4 and 5 pump strokes (Sampling volume: 400 mL and 500 mL) is not available for NX90149	1.15

※ Some detector tubes can measure various gases with a conversion chart or correction factors in the specifications. Only the gases listed on this table are available when using the 20-meter extension hoses NX90148 and NX90149.

♦ Dual tube (detector tube and pre-treat tube) type.



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING BY DETECTOR TUBE NUMBER

TUBE NO.	GAS TO BE MEASURED	SYNONYM	CAS NO.	TLV-TWA [ppm]	TLV-STEL [ppm]	UK HSE WELs -TWA [ppm]	UK HSE WELs -STEL [ppm]
NX101CM	ACETALDEHYDE	ACETIC ALDEHYDE / ETHANOL / ETHYL ALDEHYDE	75-07-0	—	C 25	20	50
NX101L	ACETALDEHYDE	ACETIC ALDEHYDE / ETHANOL / ETHYL ALDEHYDE	75-07-0	—	C 25	20	50
NX101VL	ACETALDEHYDE	ACETIC ALDEHYDE / ETHANOL / ETHYL ALDEHYDE	75-07-0	—	C 25	20	50
NX102	ACETIC ACID	ETHANOIC ACID / METHANE CARBOXYLIC ACID	64-19-7	10	15	10	20
NX102*	FORMIC ACID	HYDROGEN CARBOXYLIC ACIDE / METHANOIC ACID	64-18-6	5	10	5	—
NX102*	ACETIC ANHYDRIDE	ACETIC OXIDE / ETHANOIC ANHYDRIDE / ACETYL OXIDE	108-24-7	1	3	0.5	2
NX102*	ACRYLIC ACID	ETHYLENE CARBOXYLIC ACID / 2-PROPENOIC ACID	79-10-7	2	—	10	20
NX102*	n-BUTYRIC ACID	n-BUTANOIC ACID/ETHYLACETIC ACID / 1-PROPANE CARBOXYLIC ACID	107-92-6	—	—	—	—
NX102*	ISOBUTYRIC ACID	2-METHYLPROPANOIC ACID / DIMETHYLACETIC ACID	79-31-2	—	—	—	—
NX102*	ISOVALERIC ACID	3-METHYLBUTANOIC ACID / 3-METHYLBUTYRIC ACID	503-74-2	—	—	—	—
NX102*	MALEIC ANHYDRIDE	2,5-FURANDIONE	108-31-6	0.01mg/m3(IFV)	—	1 mg/m3	3 mg/m3
NX102*	METHACRYLIC ACID	2-METHYLPROPEONIC ACID	79-41-4	20	—	20	40
NX102*	PROPIONIC ACID	ETHYL FORMIC ACID / METHYLACETIC ACID / PROPANOIC ACID	79-09-4	10	—	10	15
NX102*	n-VALERIC ACID	PENTANOIC ACID / PROPYLACETIC ACID	109-52-4	—	—	—	—
NX103H	ACETONE	2-PROPANONE / DIMETHYL KETONE / METHYL KETONE	67-64-1	250	500	500	1500
NX103H*	TETRAHYDROFURAN	THF	109-99-9	50	100	50	100
NX103L	ACETONE		67-64-1	250	500	500	1500
NX103MH	ACETONE		67-64-1	250	500	500	1500
NX104	ACETYLENE	ETHYNE	74-86-2	—	—	—	—
NX105	ACETYLENE ETHYLENE SEPARATE MEASUREMENT	ETHYNE	74-86-2 74-85-1	200	—	—	—
NX106C	ACROLEIN	2-PROPENAL/ACRYLIC ALDEHYDE	107-02-8	—	C 0.1	0.02	0.05
NX107H	ACRYLONITRILE	CYANOETHYLENE / 2-PROPENENITRILE/VINYL CYANIDE	107-13-1	2	—	2	—
NX107L	ACRYLONITRILE	CYANOETHYLENE / 2-PROPENENITRILE/VINYL CYANIDE	107-13-1	2	—	2	—
NX107M	ACRYLONITRILE	CYANOETHYLENE / 2-PROPENENITRILE/VINYL CYANIDE	107-13-1	2	—	2	—
NX107VH	ACRYLONITRILE	CYANOETHYLENE / 2-PROPENENITRILE/VINYL CYANIDE	107-13-1	2	—	2	—
NX108H	AMMONIA		7664-41-7	25	35	25	35
NX108L	AMMONIA		7664-41-7	25	35	25	35
NX108L*	TRIMETHYLAMINE	N,N-DIMETHYLMETHANAMINE/TMA	75-50-3	5	15	—	—
NX108M	AMMONIA		7664-41-7	25	35	25	35
NX108MH	AMMONIA		7664-41-7	25	35	25	35
NX108VH	AMMONIA		7664-41-7	25	35	25	35
NX108VL	AMMONIA		7664-41-7	25	35	25	35
NX108VL*	n-BUTYLAMINE	MONOBUTYLAMINE / 1-BUTANAMINE / 1-AMINOBTUTANE	109-73-9	—	C 5	—	—
NX108VL*	CYCLOHEXYLAMINE	CYCLOHEXANAMINE / AMINOCYCLOHEXANE	108-91-8	10	—	10	—
NX108VL*	Di-n-BUTYLAMINE	n-BUTYL-1-BUTANAMINE	111-92-2	—	—	—	—
NX108VL*	Di-iso-PROPYLAMINE	DIPA / n-2-PROPANAMINE	108-18-9	5	—	5	—
NX108VL*	N,N-DIMETHYL ANILINE	N,N-DIMETHYLPHENYLAMINE	121-69-7	5	10	2	6
NX108VL*	Di-n-PROPYLAMINE		142-84-7	—	—	—	—
NX108VL*	n-METHYL ANILINE	n-METHYLBENZENAMINE / MONOMETHYLANILINE	100-61-8	0.5	—	0.5	—

\* Read across tube for this substance, not the primary application.



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING BY DETECTOR TUBE NUMBER

TUBE NO.	GAS TO BE MEASURED	SYNONYM	CAS NO.	TLV-TWA [ppm]	TLV-STEL [ppm]	UK HSE WELs -TWA [ppm]	UK HSE WELs -STEL [ppm]
NX108VL*	MORPHOLINE	TETRAHYDRO-1,4-OXAZINE	110-91-8	20	—	10	20
NX108VL*	PENTYLAMINE	n-AMYLAMINES	110-58-7	—	—	—	—
NX108VL*	PROPYLAMINE	n-PROPYLAMINE / 1-AMINOPROPANE/PROPANAMINE	107-10-8	—	—	—	—
NX108VL*	PYRIDINE		110-86-1	1	—	5	10
NX108VL*	o-TOLUIDINE	1-AMINO-2-METHYLBENZENE / 2-AMINOTOLUENE	95-53-4	2	—	0.2	—
NX108VL*	p-TOLUIDINE	4-AMINOTOLUENE / 1-AMINO-4-METHYLBENZENE	106-49-0	2	—	—	—
NX108VVH	AMMONIA		7664-41-7	25	35	25	35
NX109	ANILINE	AMINO BENZENE / PHENYLAMINE	62-53-3	2	—	1	—
NX110	ARSINE		7784-42-1	0.005	—	0.05	—
NX111H	BENZENE	CYCLOHEXATRIENE / BENZOL	71-43-2	0.5	2.5	1.0	—
NX111L	BENZENE	CYCLOHEXATRIENE / BENZOL	71-43-2	0.5	2.5	1.0	—
NX111M	BENZENE	CYCLOHEXATRIENE / BENZOL	71-43-2	0.5	2.5	1.0	—
NX111VH	BENZENE	CYCLOHEXATRIENE / BENZOL	71-43-2	0.5	2.5	1.0	—
NX112C	BROMINE		7726-95-6	0.1	0.2	0.1	0.2
NX113H	1,3-BUTADIENE	DIVINYL/VINYL ETHYLENE/BIETHYLENE	106-99-0	2	—	10	—
NX113L	1,3-BUTADIENE	DIVINYL/VINYL ETHYLENE/BIETHYLENE	106-99-0	2	—	10	—
NX113M	1,3-BUTADIENE	DIVINYL/VINYL ETHYLENE/BIETHYLENE	106-99-0	2	—	10	—
NX113VH	1,3-BUTADIENE	DIVINYL/VINYL ETHYLENE/BIETHYLENE	106-99-0	2	—	10	—
NX114	n-BUTANE	BUTANE	106-97-8	—	1000 (EX)	600	750
NX115	2-BUTANOL	SEC-BUTYL ALCOHOL	78-92-2	100	—	100	150
NX116	BUTYL ACETATE	BUTYL ETHANOATE	123-86-4	50	150	150	200
NX117CVL	CARBON DIOXIDE		124-38-9	5000	30,000	500	15,000
NX117H	CARBON DIOXIDE		124-38-9	5000	30,000	500	15,000
NX117L	CARBON DIOXIDE		124-38-9	5000	30,000	500	15,000
NX117M	CARBON DIOXIDE		124-38-9	5000	30,000	500	15,000
NX117VH	CARBON DIOXIDE		124-38-9	5000	30,000	500	15,000
NX117VL	CARBON DIOXIDE		124-38-9	5000	30,000	500	15,000
NX117VVL	CARBON DIOXIDE		124-38-9	5000	30,000	500	15,000
NX118H	CARBON DISULFIDE		75-15-0	1	—	5	—
NX118L	CARBON DISULFIDE		75-15-0	1	—	5	—
NX118M	CARBON DISULFIDE		75-15-0	1	—	5	—
NX119CL	CARBON MONOXIDE		630-08-0	25	—	20	100
NX119H	CARBON MONOXIDE		630-08-0	25	—	20	100
NX119L	CARBON MONOXIDE		630-08-0	25	—	20	100
NX119LM	CARBON MONOXIDE		630-08-0	25	—	20	100
NX119M	CARBON MONOXIDE		630-08-0	25	—	20	100
NX119SA	CARBON MONOXIDE		630-08-0	25	—	20	100
NX119SB	CARBON MONOXIDE		630-08-0	25	—	20	100
NX119VH	CARBON MONOXIDE		630-08-0	25	—	20	100
NX119VVH	CARBON MONOXIDE		630-08-0	25	—	20	100

\* Read across tube for this substance, not the primary application.





NEXTTEQ DETECTOR TUBES - COMPLETE LISTING BY DETECTOR TUBE NUMBER

TUBE NO.	GAS TO BE MEASURED	SYNONYM	CAS NO.	TLV-TWA [ppm]	TLV-STEL [ppm]	UK HSE WELs -TWA [ppm]	UK HSE WELs -STEL [ppm]
NX120	CARBON TETRACHLORIDE	TETRACHLOROMETHANE / TETRACHLOROCARBON	56-23-5	5	10	1	5
NX121	CARBONYL SULFIDE	CARBON OXSULFIDE	463-58-1	5	—	—	—
NX122H	CHLORINE		7782-50-5	0.1	0.4	—	0.5
NX122L	CHLORINE		7782-50-5	0.1	0.4	—	0.5
NX122M	CHLORINE		7782-50-5	0.1	0.4	—	0.5
NX123C	CHLORINE DIOXIDE		10049-04-4	—	C 0.1	0.1	0.3
NX124	CHLOROBENZENE	BENZENE CHLORIDE / CHLOROBENZOL / PHENYL CHLORIDE	108-90-7	10	—	1	3
NX125	CHLOROFORM	TRICHLOROMETHANE / METHANE TRICHLORIDE	67-66-3	10	—	2	—
NX126	CHLOROPICRIN	TRICHLORONITROMETHANE / NITROCHLOROFORM	76-06-2	0.1	—	—	—
NX127	CHLOROPRENE	2-CHLORO-1,3-BUTADIENE / 2-CHLOROBUTADIENE / β-CHLOROPRENE	126-99-8	1	—	—	—
NX128	CYCLOHEXANE	HEXAHYDROBENZENE / HEXAMETHYLENE / HEXANAPHTHENE	110-82-7	100	—	100	300
NX129	CYCLOHEXANOL	CYCLOHEXYL ALCOHOL / HEXAHYDROPHENOL / HEXALIN	108-93-0	50	—	50	—
NX130	CYCLOHEXANONE	KETO HEXAMETHYLENE / CYCLOHEXYL KETONE	108-94-1	20	50	10	20
NX130*	ISOPHORONE	ISOACETOPHORONE	78-59-1	—	C 5	—	—
NX130*	1-METHOXY-2-PROPANOL	PROPYLENE GLYCOL MONOMETHYL ETHER	107-98-2	50	100	100	150
NX131	DIBORANE	BOROETHANE	19287-45-7	0.1	—	—	—
NX131*	HYDROGEN SELENIDE	SELENIUM HYDRIDE	7783-07-5	0.05	—	0.02	0.05
NX132	o-DICHLOROBENZENE	1,2-DICHLOROBENZENE	95-50-1	25	50	25	50
NX133	p-DICHLOROBENZENE	1,4-DICHLOROBENZENE	106-46-7	10	—	2	10
NX134	1,1-DICHLOROETHANE	ETHYLIDENE DICHLORIDE	75-34-3	100	—	100	—
NX135	1,2-DICHLOROETHANE	ETHYLENE DICHLORIDE	107-06-2	10	—	5	—
NX136	2,2-DICHLOROETHYL ETHER	2-CHLOROETHYL ETHER / DICHLOROETHYL ETHER	111-44-4	5	10	—	—
NX137	1,2-DICHLOROETHYLENE	ACETYLENE DICHLORIDE	156-59-2	200	—	200	250
NX138	DICHLOROMETHANE	METHYLENE CHLORIDE / DCM	75-09-2	50	—	100	200
NX139	1,3-DICHLOROPROPANE		142-28-9	—	—	—	—
NX140	1,3-DICHLOROPROPENE	1,3-DICHLOROPROPYLENE / 3-CHLOROALLYL CHLORIDE / DCP	542-75-6	1	—	—	—
NX141	DIETHYL AMINE	N,N-DIETHYLAMINE / n-ETHYLETHANAMINE	109-89-7	5	15	5	10
NX141*	TRIMETHYL AMINE	N,N-DIMETHYLMEHTANAMINE	75-50-3	5	15	—	—
NX141*	ISOPROPYL AMINE	2-PROPANEAMINE / 2-AMINOPROPANE / 1-METHYLETHYLAMINE	75-31-0	5	10	—	—
NX142L	DIETHYL ETHER	ETHYL ETHER/ETHYL OXIDE / ETHER	60-29-7	400	500	100	200
NX142M	DIETHYL ETHER	ETHYL ETHER/ETHYL OXIDE / ETHER	60-29-7	400	500	100	200
NX143	N,N-DIMETHYL ACETAMIDE	ACETIC ACID DIMETHYLAMIDE / DIMETHYLACETAMIDE	127-19-5	10	—	10	20
NX144	DIMETHYL ETHER	METHYL ETHER	115-10-6	—	—	400	500
NX145	N,N-DIMETHYLFORMAMIDE	DMF / DIMETHYLFORMAMIDE	68-12-2	5	—	5	10
NX146	EPICHLOROHYDRIN	1-CHLORO-2,3-EPOXYPROPANE /	106-89-8	0.5	—	0.5	1.5
NX147L	ETHYL ACETATE		141-78-6	400	—	200	400
NX147L*	MINERAL TURPENTINE	MINERAL SPIRIT	8006-64-2	20	—	100	150
NX147L*	ISOPROPYL ACETATE		108-21-4	100	150	—	200
NX147L*	tert-BUTANOL	2-METHYL-2-PROPANOL/1,1-DIMETHYLETHANOL	75-65-0	100	—	—	—
NX147L*	BUTYL ETHER	1-BUTOXYBUTANE/Di-n-BUTYL ETHER	142-96-1	—	—	—	—

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NEXTTEQ DETECTOR TUBES - COMPLETE LISTING BY DETECTOR TUBE NUMBER

TUBE NO.	GAS TO BE MEASURED	SYNONYM	CAS NO.	TLV-TWA [ppm]	TLV-STEL [ppm]	UK HSE WELs -TWA [ppm]	UK HSE WELs -STEL [ppm]
NX147L*	BUTYL METHACRYLATE	2-METHYL BUTYLACRYLATE	97-88-1	—	—	—	—
NX147L*	tert-BUTYL METHYL ETHER	METHYL tert-BUTYL ETHER / MTBE / 2-METHOXY-2-METHYL PROPANE	1634-04-4	50	—	50	100
NX147L*	CUMENE	2-PHENYLPROPANE / ISOPROPYLBENZENE	98-82-8	(50)	—	25	50
NX147L*	CYCLOHEXENE	BENZENE TETRAHYDRIDE / HEXANAPHTHYLENE	110-83-8	(300)	—	—	—
NX147L*	DECAHYDRONAPHTHALENE	DECALIN / PERHYDRONAPHTHALENE	91-17-8	—	—	—	—
NX147L*	n-DECANE	DECANE	124-18-5	—	—	—	—
NX147L*	DIETHYL BENZENE		25340-17-4	—	—	—	—
NX147L*	ETHYL METHACRYLATE	ETHYL-2-METHYL-2-PROPENOATE / ETHYL-2-METHYLACRYLATE	97-63-2	—	—	—	—
NX147L*	ISOPROPYL ETHER	DIISOPROPYL ETHER / 2-ISOPROPOXYPROPANE	108-20-3	250	310	250	310
NX147L*	n-NONANE		111-84-2	200	—	—	—
NX147L*	1,2,4-TRIMETHYL BENZENE	PSEUDOCUMENE	95-63-6	25	—	25	—
NX147L*	n-UNDECANE	HENDECANE	1120-21-4	—	—	—	—
NX147M	ETHYL ACETATE		141-78-6	400	—	200	400
NX147M*	METHYL ACETATE		79-20-9	200	250	200	250
NX148L	ETHYL ALCOHOL	ETHANOL	64-17-5	—	1000	1000	—
NX148VL	ETHYL ALCOHOL	ETHANOL	64-17-5	—	1000	1000	—
NX148VVL	ETHYL ALCOHOL	ETHANOL	64-17-5	—	1000	1000	—
NX149	ETHYL BENZENE	ETHYLBENZOL / PHENYLETHANE / EB	100-41-4	20	—	100	125
NX150	ETBE (ETHYL-TERT-BUTYL ETHER)	2-ETHOXY-2-METHYLPROPANE	637-92-3	25	—	—	—
NX151	ETHYL CELLOSOLVE	2-ETHOXYETHANOL / ETHYLENE GLYCOL MONOETHYL ETHER	110-80-5	5	—	2	—
NX151*	METHYL CELLOSOLVE	2-METHOXYETHANOL / ETHYLENE GLYCOL MONOMETHYL ETHER	109-86-4	0.1	—	1	—
NX151*	1-BUTANOL	n-BUTANOL / n-BUTYL ALCOHOL	71-36-3	20	—	—	50
NX151*	BENZALDEHYDE		100-52-7	2	—	—	—
NX151*	BUTYL CELLOSOLVE	2-BUTOXYETHANOL / ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	20	—	25	50
NX151*	CROTONALDEHYDE	2-BUTENAL / β-METHYLACROLEIN / METHYL PROPENAL	4170-30-3	—	C 0.3	—	—
NX151*	DIACETONE ALCOHOL	4-HYDROXY-4-METHYLPENTAN-2-ONE	123-42-2	50	—	50	75
NX151*	DICYCLOPENTADIENE	1,3-DICYCLOPENTADIENE	77-73-6	(0.5)	(1)	5	—
NX151*	ETHYL CELLOSOLVE ACETATE	2-ETHOXYETHYL ACETATE / ETHYLENE GLYCOL ETHYL ETHER ACETATE	111-15-9	5	—	2	—
NX151*	FURFURAL	2-FURANCARBOXALDEHYDE / 2-FURALDEHYDE	98-01-1	0.2	—	2	5
NX151*	ISOPRENE	2-METHYL-1,3-BUTADIENE / 2-METHYLBUTADIENE	78-79-5	—	—	—	—
NX151*	ISOPROPYL CELLOSOLVE	2-ISOPROPOXYETHANOL	109-59-1	25	—	—	—
NX151*	MESITYL OXIDE	4-METHYL-3-PENTEN-2-ONE	141-79-7	15	25	—	—
NX151*	METHYL CELLOSOLVE ACETATE	2-METHOXYETHYL ACETATE / ETHYLENE GLYCOL MONOMETHYL ETHER ACETATE	110-49-6	0.1	—	1	—
NX151*	1-PROPANOL	n-PROPANOL / n-PROPYL ALCOHOL	71-23-8	100	—	200	250
NX151*	TETRAHYDROTHIOPHENE	TETRAMETHYLENE SULFIDE / THIOCYCLOPENTANE	110-01-0	—	—	—	—
NX152CL	ETHYLENE	ETHENE	74-85-1	200	—	—	—
NX152L	ETHYLENE	ETHENE	74-85-1	200	—	—	—
NX152M	ETHYLENE	ETHENE	74-85-1	200	—	—	—

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NEXTTEQ DETECTOR TUBES - COMPLETE LISTING BY DETECTOR TUBE NUMBER

TUBE NO.	GAS TO BE MEASURED	SYNONYM	CAS NO.	TLV-TWA [ppm]	TLV-STEL [ppm]	UK HSE WELs -TWA [ppm]	UK HSE WELs -STEL [ppm]
NX153	ETHYLENE DIBROMIDE	1,2-DIBROMOETHANE / EDB	106-93-4	—	—	0.5	—
NX154L	ETHYLENE GLYCOL	1,2-ETHANEDIOL / 1,2-DIHYDROXYETHANE	107-21-1	25(V)	50 (V),10 mg/m3 (I,H)	20	40
NX154M	ETHYLENE GLYCOL	1,2-ETHANEDIOL / 1,2-DIHYDROXYETHANE	107-21-1	25(V)	50 (V),10 mg/m3 (I,H)	20	40
NX155H	ETHYLENE OXIDE	1,2-EPOXYETHANE / OXIRANE / DIMETHYLENE OXIDE	75-21-8	1	—	5	—
NX155L	ETHYLENE OXIDE	1,2-EPOXYETHANE / OXIRANE / DIMETHYLENE OXIDE	75-21-8	1	—	5	—
NX155L*	PROPYLENE GLYCOL	1,2-PROPANEDIOL / METHYL ETHYLENE GLYCOL	57-55-6	—	—	—	—
NX155L*	PROPYLENE OXIDE	1,2-EPOXYPROPANE	75-56-9	2	—	5	—
NX155M	ETHYLENE OXIDE	1,2-EPOXYETHANE / OXIRANE / DIMETHYLENE OXIDE	75-21-8	1	—	5	—
NX155VH	ETHYLENE OXIDE	1,2-EPOXYETHANE / OXIRANE / DIMETHYLENE OXIDE	75-21-8	1	—	5	—
NX155VH*	FURAN	FURFURAN / DIVINYLENE OXIDE	110-00-9	—	—	—	—
NX155VH*	ISOPROPYL ALCOHOL	2-PROPANOL / IPA / ISOPROPANOL / DIMETHYLCARBINOL	67-63-0	200	400	400	500
NX155VH*	METHYL ETHYL KETONE	ETHYL METHYL KETONE / 2-BUTANONE / MEK / METHYL ACETONE	78-93-3	200	300	200	300
NX155VH*	METHYL ISOBUTYL KETONE	4-METHYL-2-PENTANONE / ISOPROPYLACETONE / HEXONE	108-10-1	20	75	50	100
NX155VL	ETHYLENE OXIDE	1,2-EPOXYETHANE / OXIRANE / DIMETHYLENE OXIDE	75-21-8	1	—	5	—
NX156M	ETHYL MERCAPTAN IN LP GAS		75-08-1	0.5	—	0.5	2
NX156M*	tert-BUTYL MERCAPTAN	2-METHYL-2-PROPANETHIOL	75-66-1	—	—	—	—
NX156MH	ETHYL MERCAPTAN	ETHANETHIOL / THIOETHYL ALCOHOL	75-08-1	0.5	—	0.5	2
NX157H	FORMALDEHYDE	METHYL ALDEHYDE / METHYLENE OXIDE / METHANAL	50-00-0	0.1	0.3	2.0	2.0
NX157L	FORMALDEHYDE	METHYL ALDEHYDE / METHYLENE OXIDE / METHANAL	50-00-0	0.1	0.3	2.0	2.0
NX157M	FORMALDEHYDE	METHYL ALDEHYDE / METHYLENE OXIDE / METHANAL	50-00-0	0.1	0.3	2.0	2.0
NX158	FURFURYL ALCOHOL	2-FURACARBINOL / 2-HYDROXYMETHYLFURAN	98-00-0	0.2	—	—	—
NX159	GASOLINE	PETROL	8006-61-9	300	500	—	—
NX160*	MINERAL TURPENTINE	MINERAL SPIRIT	8006-64-2	20	—	100	150
NX160*	ISOBUTANE		106-97-8	—	1000	600	750
NX160*	KEROSENE		8008-20-6	200	—	—	—
NX160*	PENTANE		109-66-0	1000	—	600	—
NX160*	n-HEXANE		110-54-3	50	—	20	—
NX160*	HEPTANE		142-82-5	400	500	500	—
NX160*	OCTANE		111-65-9	300	—	—	—
NX160*	CYCLOHEXANE		110-82-7	100	—	100	300
NX161H	n-HEXANE	HEXYL HYDRIDE	110-54-3	50	—	20	—
NX161L	n-HEXANE	HEXYL HYDRIDE	110-54-3	50	—	20	—
NX161M	n-HEXANE	HEXYL HYDRIDE	110-54-3	50	—	20	—
NX161M*	HEPTANE		142-82-5	400	500	500	—
NX161M*	ISOBUTANE	2-METHYLPROPANE / 1,1-DIMETHYLETHANE / TRIMETHYLMETHANE	75-28-5	—	—	—	—
NX161M*	ISOBUTYLENE	ISOBUTENE / 2-METHYLPROPEN / 1,1-DIMETHYLETHYLENE	115-11-7	—	—	—	—
NX161M*	METHYL CYCLOHEXANE	HEXAHYDROTOLUENE / CYCLOHEXYLMETHANE	108-87-2	400	—	—	—
NX161M*	PENTANE	n-PENTANE / AMYL HYDRIDE	109-66-0	1000	—	600	—
NX161M*	2,2,4-TRIMETHYL PENTANE	ISOBUTYLTRIMETHYLMETHANE / ISOCTANE	540-84-1	—	—	—	—
NX162	HYDRAZINE	DIAMIDE / DIAMINE / NITROGEN HYDRIDE	302-01-2	0.01	—	0.02	0.1

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TUBE NO.	GAS TO BE MEASURED	SYNONYM	CAS NO.	TLV-TWA [ppm]	TLV-STEL [ppm]	UK HSE WELs -TWA [ppm]	UK HSE WELs -STEL [ppm]
NX163	HYDROGEN		1333-74-0	—	—	—	—
NX164L	HYDROGEN CHLORIDE		7647-01-0	—	C 2	1	5
NX164M	HYDROGEN CHLORIDE		7647-01-0	—	C 2	1	5
NX165H	HYDROGEN CYANIDE	HYDROCYANIC ACID / PRUSSIC ACID / FORMONITRILE	74-90-8	—	C 4.7	0.9	4.5
NX165L	HYDROGEN CYANIDE	HYDROCYANIC ACID / PRUSSIC ACID / FORMONITRILE	74-90-8	—	C 4.7	0.9	4.5
NX165M	HYDROGEN CYANIDE	HYDROCYANIC ACID / PRUSSIC ACID / FORMONITRILE	74-90-8	—	C 4.7	0.9	4.5
NX166	HYDROGEN FLUORIDE		7664-39-3	0.5	C 2	1.8	3
NX167	HYDROGEN PEROXIDE	HYDROPEROXIDE / HYDROGEN DIOXIDE	7722-84-1	1	—	1	2
NX168	HYDROGEN SELENIDE		7783-07-5	0.05	—	—	—
NX169H	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX169L	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX169LM	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX169M	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX169MH	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX169UH	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX169VH	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX169VL	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX169VH	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX169VVL	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX170	HYDROGEN SULFIDE- MERCAPTANS- SEPARATE MEASUREMENT		7783-06-4 —	1 —	5 —	5 —	10 —
NX171	ISOBUTYL ACETATE	2-METHYLPROPYL ACETATE	110-19-0			150	187
NX171*	NAPHTHALENE		91-20-3	10	—	—	—
NX172	ISOBUTYL ALCOHOL	ISOBUTANOL / 2-METHYL-1-PROPANOL	78-83-1	50	—	50	75
NX173	ISOPENTYL ACETATE	ISOAMYL ACETATE / 3-METHYLBUTYL ACETATE	123-92-2	—	—	—	—
NX174	ISOPENTYL ALCOHOL	ISOAMYL ALCOHOL / 3-METHYL-1-BUTANOL	123-51-3	100	125	100	125
NX175	ISOPROPYL ALCOHOL	2-PROPANOL / IPA	67-63-0	200	400	400	500
NX176	MERCURY VAPOR		7439-97-6	0.025 mg/m3	—	0.02 mg/m3	—
NX177*	BUTYL ACRYLATE	ACRYLIC ACID n-BUTYL ESTER / BUTYL 2-PROPENOATE	141-32-2	2	—	1	5
NX177	METHYL ACRYLATE	ACRYLIC ACID, METHYL ESTER / METHYL-2-PROPENOATE	96-33-3	2	—	5	10
NX177*	ETHYL ACRYLATE	ACRYLIC ACID ETHYL ESTER / ETHYL PROPENOATE	140-88-5	5	15	5	10
NX177*	ISOBUTYL ACRYLATE		106-63-8	—	—	—	—
NX178H	METHYL ALCOHOL	METHANOL / CARBINOL / WOOD ALCOHOL	67-56-1	200	250	200	250
NX178L	METHYL ALCOHOL	METHANOL / CARBINOL / WOOD ALCOHOL	67-56-1	200	250	200	250
NX178L*	1,4-DIOXANE	1,4-DIETHYLENE DIOXIDE	123-91-1	20	—	20	—
NX178SM*	METHANOL IN LP GAS		67-56-1	200	250	200	250
NX179*	DIMETHYL AMINE	DMA	124-40-3	5	15	2	6
NX179*	ETHYL AMINE	ETHANAMINE / AMINOETHANE	75-04-7	5	15	2	6
NX179	METHYL AMINE	METHANAMINE / AMINOMETHANE / MONOMETHYLAMINE	74-89-5	5	15	—	—
NX180H	METHYL BROMIDE	BROMOMETHANE	74-83-9	1	—	5	15
NX180L	METHYL BROMIDE	BROMOMETHANE	74-83-9	1	—	5	15

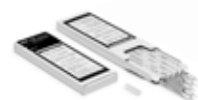
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NEXTTEQ DETECTOR TUBES - COMPLETE LISTING BY DETECTOR TUBE NUMBER

TUBE NO.	GAS TO BE MEASURED	SYNONYM	CAS NO.	TLV-TWA [ppm]	TLV-STEL [ppm]	UK HSE WELs -TWA [ppm]	UK HSE WELs -STEL [ppm]
NX180M	METHYL BROMIDE	BROMOMETHANE	74-83-9	1	—	5	15
NX180M*	BROMOCHLOROMETHANE	CHLOROBROMOMETHANE	74-97-5	200	—	—	—
NX180M*	BROMOFORM	TRIBROMOMETHANE / METHYL TRIBROMIDE	75-25-2	0.5	—	—	—
NX180M*	1-BROMOPROPANE	n-PROPYL BROMIDE	106-94-5	0.1	—	—	—
NX180M*	2-BROMOPROPANE	iso-PROPYL BROMIDE	75-26-3	—	—	—	—
NX180M*	DIBROMOMETHANE	METHYLENE BROMIDE / METHYLENE DIBROMIDE	74-95-3	—	—	—	—
NX180M*	1,2-DICHLOROPROPANE	PROPYLENE DICHLORIDE	78-87-5	10	—	—	—
NX180M*	ETHYL BROMIDE	BROMOETHANE	74-96-4	5	—	—	—
NX180SVH*	METHYL BROMIDE	BROMOMETHANE	74-83-9	1	—	5	15
NX181	1,1,1-TRICHLOROETHANE	METHYL CHLOROFORM / METHYLTRICHLOROMETHANE	71-55-6	350	450	100	200
NX182	METHYL CYCLOHEXANOL	HEXAHYDROMETHYLPHENOL	25639-42-3	50	—	50	75
NX183	METHYL CYCLOHEXANONE		583-60-8	50	75	50	75
NX184L	METHYL ETHYL KETONE	2-BUTANONE	78-93-3	200	300	200	300
NX184L*	METHYL PROPYL KETONE	2-PENTANONE / ETHYL ACETONE / MPK	107-87-9	—	150	200	250
NX184L*	DIISOBUTYL KETONE	2,6-DIMETHYL-4-HEPTANONE / ISOVALERONE	108-83-8	25	—	25	—
NX184L*	METHYL AMYL KETONE	2-HEPTANONE	110-43-0	50	—	50	100
NX184M	METHYL ETHYL KETONE	2-BUTANONE	78-93-3	200	300	200	300
NX184M*	BUTYL ACETATE		123-86-4	50	150	150	200
NX184M*	1,4-DIOXANE	1,4-DIETHYLENE DIOXIDE	123-91-1	20	—	20	—
NX184M*	ISOBUTYL ACETATE	2-METHYLPROPYL ACETATE	110-19-0	50	150	150	187
NX184M*	ISOPROPYL ACETATE	2-PROPYL ACETATE	108-21-4	100	150	—	200
NX184M*	PROPYL ACETATE	1-ACETOXYPROPANE / 1-PROPYL ACETATE	109-60-4	100	150	200	250
NX185L	METHYL IODIDE	IODOMETHANE	74-88-4	2	—	2	0
NX185VH	METHYL IODIDE	IODOMETHANE	74-88-4	2	—	2	0
NX186	METHYL ISOBUTYL KETONE	4-METHYL-2-PENTANONE / ISOPROPYL ACETONE / HEXONE	108-10-1	20	75	50	100
NX187H	MITC (METHYL ISOTHIOCYANATE)		556-61-6	—	—	—	—
NX187L	MITC (METHYL ISOTHIOCYANATE)		556-61-6	—	—	—	—
NX187M	MITC (METHYL ISOTHIOCYANATE)		556-61-6	—	—	—	—
NX188H	METHYL MERCAPTAN	METHANETHIOL / MERCAPTOMETHANE / THIOMETHANOL	74-93-1	0.5	—	0.5	—
NX188L*	tert-BUTYL MERCAPTAN	2-METHYL-2-PROPANETHIOL	75-66-1	—	—	—	—
NX188L*	ETHYL MERCAPTAN	ETHANETHIOL / THIOETHYL ALCOHOL	75-08-1	0.5	—	0.5	2
NX188L*	ISOPROPYL MERCAPTAN	2-PROPANETHIOL	75-33-2	—	—	—	—
NX188L	METHYL MERCAPTAN	METHANETHIOL/MERCAPTOMETHANE / THIOMETHANOL	74-93-1	0.5	—	0.5	—
NX188L*	n-PROPYL MERCAPTAN	1-PROPANETHIOL	107-03-9	—	—	—	—
NX188M	METHYL MERCAPTAN	METHANETHIOL / MERCAPTOMETHANE / THIOMETHANOL	74-93-1	0.5	—	0.5	—
NX189	METHYL METHACRYLATE	METHACRYLIC ACID MEHTYL ESTER / METHYL 2-METHYLPROPENOATE	80-62-6	50	100	50	100
NX189*	ALLYL ALCOHOL	VINYL CARBINOL / PROPENYL ALCOHOL / 3-HYDROXYPROPENE	107-18-6	0.5	—	2	4
NX190	METHYL STYRENE	VINYL TOLUENE / ETHENYLMETHYLBENZENE	98-83-9	10	—	—	—
NX191	MONOETHANOL AMINE	2-HYDROXYETHYLAMINE / 2-AMINOETHANOL	141-43-5	3	6	1	3
NX192C	NICKEL CARBONYL	NICKEL TETRACARBONYL	13463-39-3	—	C 0.05	—	—
NX193	NITRIC ACID VAPOR		7697-37-2	2	4	—	1

\* Read across tube for this substance, not the primary application.



NEXTTEQ DETECTOR TUBES - COMPLETE LISTING BY DETECTOR TUBE NUMBER

TUBE NO.	GAS TO BE MEASURED	SYNONYM	CAS NO.	TLV-TWA [ppm]	TLV-STEL [ppm]	UK HSE WELs -TWA [ppm]	UK HSE WELs -STEL [ppm]
NX194H	NITROGEN DIOXIDE		10102-44-0	0.2	—	0.5	1
NX194L	NITROGEN DIOXIDE		10102-44-0	0.2	—	0.5	1
NX194M	NITROGEN DIOXIDE		10102-44-0	0.2	—	0.5	1
NX195C	NITROGEN OXIDE & DIOXIDE			NO:25 NO2: 0.2	—	NO:2 NO2:0.5	NO:2.5 NO2: 1
NX195C2	NITROGEN OXIDE & DIOXIDE			NO:25 NO2: 0.2	—	NO:2 NO2:0.5	NO:2.5 NO2: 1
NX196H	NITROGEN OXIDES			NO:25 NO2: 0.2	—	NO:2	NO:2.5
NX196L	NITROGEN OXIDES			NO:25 NO2: 0.2	—	NO:2	NO:2.5
NX196M	NITROGEN OXIDES			NO:25 NO2: 0.2	—	NO:2	NO:2.5
NX197C	ORGANIC GAS CHECKER			—	—	—	—
NX198	OXYGEN		7782-44-7	—	—	—	—
NX198SA	OXYGEN		7782-44-7	—	—	—	—
NX198SB	OXYGEN		7782-44-7	—	—	—	—
NX199	OXYGEN-CARBON DIOXIDE-SEPARATE MEASUREMENT		7782-44-7 124-38-9	— 5,000	— 30,000	— 5,000	— 15,000
NX200H	OZONE		10028-15-6	0.05 *HEAVY WORK	—	—	0.2
NX200L	OZONE		10028-15-6	0.05 *HEAVY WORK	—	—	0.2
NX200M	OZONE		10028-15-6	0.05 *HEAVY WORK	—	—	0.2
NX201	PENTYL ACETATE	AMYL ACETATE	628-63-7	50	100	50	100
NX202*	CRESOL	METHYL PHENOL TRICRESOL	1319-77-3	20mg/m3(IFV)	—	—	—
NX202	PHENOL	CARBOLIC ACID / PHENIC ACID / HYDROXYBENZENE	108-95-2	5	—	2	4
NX203	PHOSGENE	CARBONYL CHLORIDE	75-44-5	0.1	—	0.02	0.06
NX204H	PHOSPHINE		7803-51-2	0.05	C 0.15	0.1	0.2
NX204L	PHOSPHINE		7803-51-2	0.05	C 0.15	0.1	0.2
NX204L*	ARSINE		7784-42-1	0.005	—	0.05	—
NX204LM	PHOSPHINE		7803-51-2	0.05	C 0.15	0.1	0.2
NX204M	PHOSPHINE		7803-51-2	0.05	C 0.15	0.1	0.2
NX204MH	PHOSPHINE		7803-51-2	0.05	C 0.15	0.1	0.2
NX204SH	PHOSPHINE IN ACETYLENE		7803-51-2	0.05	C 0.15	0.1	0.2
NX204SM	PHOSPHINE IN ACETYLENE		7803-51-2	0.05	C 0.15	0.1	0.2
NX204VH	PHOSPHINE		7803-51-2	0.05	C 0.15	0.1	0.2
NX205	PROPANE	LP GAS (LPG)	74-98-6	—	—	—	—
NX206	PROPYL ACETATE	2-PROPANOL / ISOPROPANOL / DIMETHYLCARBINOL	109-60-4	100	150	200	250
NX207	PROPYLENE	METHYLETHYLENE / PROPENE	115-07-1	500	—	—	—
NX208H	PROPYLENE OXIDE	1,2-EPOXYPROPANE	75-56-9	2	—	5	—
NX208L	PROPYLENE OXIDE	1,2-EPOXYPROPANE	75-56-9	2	—	5	—
NX209	SILANE	SILICON TETRAHYDRIDE / MONOSILANE	7803-62-5	5	—	0.5	1
NX210L	STYRENE	VINYLBENZENE / PHENYLETHYLENE / ETHENYLBENZENE	100-42-5	(20)	(40)	100	250
NX210LM	STYRENE	VINYLBENZENE / PHENYLETHYLENE / ETHENYLBENZENE	100-42-5	(20)	(40)	100	250
NX210LM*	DIVINYLBENZENE	VINYLBENZENE / DVB	1321-74-0	10	—	—	—
NX210LM*	α-PINENE	2-PINENE	80-56-8	—	—	—	—

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NEXTTEQ DETECTOR TUBES - COMPLETE LISTING BY DETECTOR TUBE NUMBER

TUBE NO.	GAS TO BE MEASURED	SYNONYM	CAS NO.	TLV-TWA [ppm]	TLV-STEL [ppm]	UK HSE WELs -TWA [ppm]	UK HSE WELs -STEL [ppm]
NX211H	SULFUR DIOXIDE		7446-09-5	—	0.25	0.50	1.00
NX211L	SULFUR DIOXIDE		7446-09-5	—	0.25	0.50	1.00
NX211LM	SULFUR DIOXIDE		7446-09-5	—	0.25	0.50	1.00
NX211M	SULFUR DIOXIDE		7446-09-5	—	0.25	0.50	1.00
NX211MH	SULFUR DIOXIDE		7446-09-5	—	0.25	0.50	1.00
NX211SB	SULFUR DIOXIDE		7446-09-5	—	0.25	0.50	1.00
NX211SF	SULFUR DIOXIDE		7446-09-5	—	0.25	0.50	1.00
NX212	SULFURIC ACID		7664-93-9	0.2mg/m3	—	0.05 mg/m3	—
NX213H	TETRACHLOROETHYLENE	PER / ETHYLENE TETRACHLORIDE / PERCHLOROETHYLENE	127-18-4	25	100	20	40
NX213L	TETRACHLOROETHYLENE	PER / ETHYLENE TETRACHLORIDE / PERCHLOROETHYLENE	127-18-4	25	100	20	40
NX213LM	TETRACHLOROETHYLENE	PER / ETHYLENE TETRACHLORIDE / PERCHLOROETHYLENE	127-18-4	25	100	20	40
NX213M	TETRACHLOROETHYLENE	PER / ETHYLENE TETRACHLORIDE / PERCHLOROETHYLENE	127-18-4	25	100	20	40
NX214	TETRAETHOXSILANE	ETHYL SILICATE / TETRAETHYL SILICATE	78-10-4	10	—	—	—
NX215	TETRAHYDROFURAN	THF / TETRAMETHYLENE OXIDE / DIETHYLENE OXIDE	109-99-9	50	100	50	100
NX216H	TOLUENE	METHYL BENZENE / TOLUOL / PHENYLMETHANE	108-88-3	20	—	50	100
NX216L	TOLUENE	METHYL BENZENE / TOLUOL / PHENYLMETHANE	108-88-3	20	—	50	100
NX216M	TOLUENE	METHYL BENZENE / TOLUOL / PHENYLMETHANE	108-88-3	20	—	50	100
NX217	1,1,2-TRICHLOROETHANE	VINYL TRICHLORIDE / -TRICHLOROETHANE	79-00-5	10	—	—	—
NX218H	TRICHLOROETHYLENE	TRICHLOROETHENE / ETHYLENE TRICHLORIDE / TCE	79-01-6	10	25	100	150
NX218L	TRICHLOROETHYLENE	TRICHLOROETHENE / ETHYLENE TRICHLORIDE / TCE	79-01-6	10	25	100	150
NX218M	TRICHLOROETHYLENE	TRICHLOROETHENE / ETHYLENE TRICHLORIDE / TCE	79-01-6	10	25	100	150
NX219	TRIETHYLAMINE	N,N-DIETHYLETHANAMINE	121-44-8	0.5	1	2	4
NX220	VINYL ACETATE	VAM/ACETIC ACID ETHENYL ESTER	108-05-4	10	15	5	10
NX220*	METHYL BUTYL KETONE	2-HEXANONE / n-BUTYL METHYL KETONE / MBK	591-78-6	5	10	5	—
NX221H	VINYL CHLORIDE	CHLOROETHENE / CHLOROETHYLENE / VCM	75-01-4	1	—	3	—
NX221L	VINYL CHLORIDE	CHLOROETHENE / CHLOROETHYLENE / VCM	75-01-4	1	—	3	—
NX221M	VINYL CHLORIDE	CHLOROETHENE / CHLOROETHYLENE / VCM	75-01-4	1	—	3	—
NX222L	WATER VAPOR			—	—	—	—
NX222M	WATER VAPOR			—	—	—	—
NX222PH	WATER VAPOR			—	—	—	—
NX222PL	WATER VAPOR			—	—	—	—
NX222PM	WATER VAPOR			—	—	—	—
NX223L	XYLENE	DIMETHYL BENZENE	1330-20-7	100	150	50	100
NX223LM	XYLENE	DIMETHYL BENZENE	1330-20-7	100	150	50	100
NX224	DIESEL FUEL		68334-30-5	100mg / m3 (IFV)	—	—	—
NX225	DIMETHYL SULFIDE	THIOBISMETHANE / METHYL SULFIDE	75-18-3	10	—	—	—
NX301	INORGANIC GAS QUALITATIVE			—	—	—	—
NX302	ORGANIC GAS QUALITATIVE			—	—	—	—
NX401H	CHLORIDE ION			—	—	—	—
NX401L	CHLORIDE ION			—	—	—	—
NX401M	CHLORIDE ION			—	—	—	—

\* Read across tube for this substance, not the primary application.



## NEXTTEQ DETECTOR TUBES - COMPLETE LISTING BY DETECTOR TUBE NUMBER

TUBE NO.	GAS TO BE MEASURED	SYNONYM	CAS NO.	TLV-TWA [ppm]	TLV-STEL [ppm]	UK HSE WELs -TWA [ppm]	UK HSE WELs -STEL [ppm]
NX402	COPPER ION			—	—	—	—
NX403	CYANIDE ION			—	—	—	—
NX404	FREE RESIDUAL CHLORINE			—	—	—	—
NX405	SALINITY			—	—	—	—
NX406H	SULFIDE ION			—	—	—	—
NX406L	SULFIDE ION			—	—	—	—
NX407	WATER CONTENT IN SOLVENT			—	—	—	—
NX501H	AMMONIA		7664-41-7	25	35	25	35
NX501L	AMMONIA		7664-41-7	25	35	25	35
NX502	p-DICHLOROBENZENE	1,4-DICHLOROBENZENE	106-46-7	10	—	2	10
NX503H	FORMALDEHYDE	METHYL ALDEHYDE / MEHYLENE OXIDE / METHANOL	50-00-0	0.1	0.3	2.0	2.0
NX503L	FORMALDEHYDE	METHYL ALDEHYDE / MEHYLENE OXIDE / METHANOL	50-00-0	0.1	0.3	2.0	2.0
NX503M	FORMALDEHYDE	METHYL ALDEHYDE / MEHYLENE OXIDE / METHANOL	50-00-0	0.1	0.3	2.0	2.0
NX504	HYDROGEN FLUORIDE		7664-39-3	0.5	C 2	1.8	3
NX505	NITROGEN DIOXIDE		10102-44-0	0.2	—	0.5	1
NX506	ORGANIC ACID			—	—	—	—
NX507	TETRACHLOROETHYLENE	PER / ETHYLENE TETRACHLORIDE / PERCHLOROETHYLENE	127-18-4	25	100	20	40
NX508	TRICHLOROETHYLENE	TRICHLOROETHENE / ETHYLENE TRICHLORIDE / TCE	79-01-6	10	25	100	150
NX509	TOLUENE	METHYL BENZENE / TOLUOL / PHENYLMETHANE	108-88-3	20	—	50	100
NX509*	ETHYL BENZENE	ETHYLBENZOL / PHENYLETHANE / EB	100-41-4	20	—	100	125
NX509*	XYLENE	DIMETHYL BENZENE	1330-20-7	100	150	50	100
NX601	AMMONIA		7664-41-7	25	35	25	35
NX602	CARBON MONOXIDE		630-08-0	25	—	20	100
NX603	HYDROGEN SULFIDE		7783-06-4	1	5	5	10
NX604	SULFUR DIOXIDE		7446-09-5	—	0.25	0.50	1.00
NX605	TOLUENE	METHYLBENZENE / TOLUOL / PHENYLMETHANE	108-88-3	20	—	50	100
NX701	GASOLINE/ KEROSENE		86290-81-5 8008-20-6	—	—	—	—
NX702	GASOLINE/ KEROSENE		86290-81-5 8008-20-6	—	—	—	—
NX711	CARBON MONOXIDE IN BLOOD		630-08-0	—	—	—	—
NX712	ETHYL ALCOHOL IN BLOOD		64-17-5	—	—	—	—
NX713	HYDROGEN CYANIDE IN BLOOD		74-90-8	—	—	—	—
NX714	HYDROGEN SULFIDE IN BLOOD		7783-06-4	—	—	—	—
NX715	PARAQUAT IN BLOOD		4685-14-7	—	—	—	—
NX801	CARBON DIOXIDE IN COMPRESSED BREATHING AIR		124-38-9	—	—	—	—
NX802	CARBON MONOXIDE IN COMPRESSED BREATHING AIR		124-38-9	—	—	—	—
NX803	OIL MIST IN COMPRESSED BREATHING AIR			—	—	—	—
NX804	OXYGEN IN COMPRESSED BREATHING AIR		7782-44-7	—	—	—	—
NX805	WATER VAPOR IN COMPRESSED BREATHING AIR			—	—	—	—

\* Read across tube for this substance, not the primary application.





# Nextteq Accessories and Products At-A-Glance

## ■ One Hand Operation Adapter

P/N NX90146

Nextteq's One Hand Operation Adapter is ideal for sampling in hard-to-reach places, such as over vats and from a ladder. With the One Hand Operation Adapter and the tube inserted into the pump, the pump handle can be drawn back and locked while maintaining the pump vacuum without taking a sample. When you are ready, the pump can be activated and the sample taken with just the push of a button.



## ■ Hot Air Probe and Hot Air Probe Holder

Hot Air Probe P/N NX90151

Hot Air Probe Holder P/N NX90152

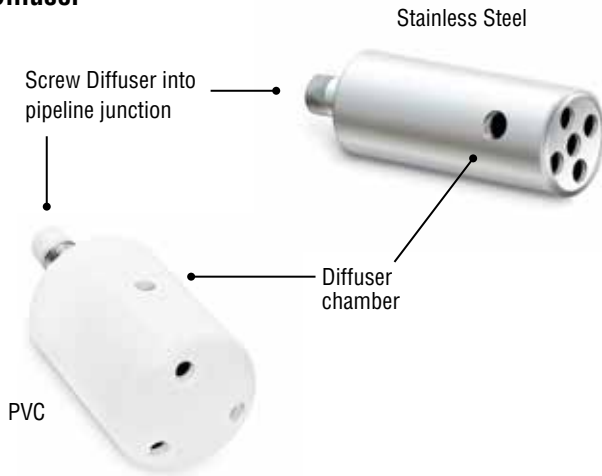
Most Nextteq detector tubes are designed to be used at temperatures in the range of 32° – 104°F (0-40°C). However, some samples such as flue gases, stack emissions and automotive exhaust are at elevated temperatures. The Nextteq Hot Probe rapidly cools samples as hot as 1112°F (600°C) down to an ambient temperature before the sample enters the detector tube. The hot probe holder provides horizontal and vertical support for the tube and hot probe. No tools are required for assembly.



# Nextteq Accessories and Products At-A-Glance



## ■ Diffuser



The Diffuser, available in either PVC or Stainless Steel, provides a convenient method for sampling gas in pipelines. Designed for use with Nextteq Gas Sampling Pumps and Detector Tubes, the Diffusers are intrinsically safe, rugged, reusable and maintain the sample integrity by not reacting with most chemicals. To prepare for the sample, simply screw the diffuser into a pipeline junction. Prepare the Nextteq Pump and applicable Nextteq Detector Tube, open the pipeline valve, insert the tube in the diffuser chamber and begin sampling.

PVC Diffuser constructed of inert material  
Diffuser constructed of Stainless Steel

P/N STD-910  
P/N 90101



- Confined space entry testing
- Sampling groundwater wells
- Testing underground storage tanks
- Ship hull sampling

## ■ Extension Hoses

5-Meter Extension Hose:	P/N NX90154
10-Meter Extension Hose:	P/N NX90147
20-Meter Extension Hose with tube holder for single tube applications:	P/N NX90148
20-Meter Extension Hose with tube holder for dual tube applications:	P/N NX90149

All of Nextteq's Extension Hoses (5, 10, and 20-meter) easily screw onto Nextteq's NX-1000 gas sampling pump and safely enable efficient remote sampling of gases by non-technical personnel. No tools are required for assembly. All Nextteq extension hoses have a narrow diameter to fit into tight spaces and are constructed of synthetic rubber for flexibility, strength, and durability.

### 5 and 10 Meter Extension Hoses:

The convenient 5 and 10-meter hose design eliminates the need for you to factor in hose line air volume when sampling. Sample results can be read directly from the detector tube; no additional calculations, charts or correction factors are required.

### 20-Meter Extension Hoses:

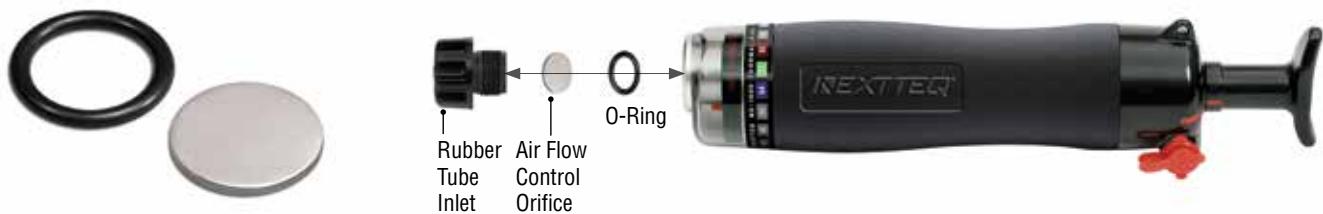
The 20-Meter Extension Hose comes in two configurations: One with a tube holder for single tube applications (P/N NX90148) and one with a tube holder for dual tube applications (P/N NX90149). Designed to satisfy demand for efficient and complete sampling of a ship's large cargo holds, stack sampling, and other deep confined spaces: the 20-meter hose is identical in materials, construction and method of assembly as the 5 and 10-meter hoses. Due to the long length of the 20-meter extension hose, there is increased flow resistance causing a reduction in the vacuum which affects the length of stain. Therefore, some tubes need a correction factor and/or longer than normal sampling time to account for the reduced vacuum.



## ■ Air Flow Control Orifice

P/N NX90160

Some Nextteq detector tubes require management to the air flow in order to achieve an accurate reading. The Nextteq Air Flow Control Orifice includes an O-ring and should be used with the following tubes: NX105, NX204SH, NX204SM, NX711, NX712, NX713 and NX714.



## ■ Nextteq VeriAir Flex® Manual-Inflating Sample Bags

A completely new approach to detector tube use. Non-technical personnel can easily and inexpensively collect an atmospheric grab sample using the VeriAir Flex, and then perform detector tube measurements afterwards at a time and location that is convenient. The patented design allows an atmospheric grab sample to be collected directly without any need for a calibrated sampling pump or other equipment. Simple, intrinsically safe, and made of durable, analytical grade, multi-layer foil, VeriAir Flex sample bags are reusable and can be air shipped for analysis.

- No additional equipment needed
- Ready to sample any time, any place
- Collect a more accurate & reliable sample



**STEP 1:**  
Rapidly collect a whole air or gas sample for analysis or storage.



**STEP 2:**  
Take an immediate reading with the Nextteq Gas Detector Tube and Pump System Handbook or ship to a lab for analysis.



# Nextteq Accessories and Products At-A-Glance

## ■ Telescoping Extension Pole

P/N NX90150

With Nextteq's adjustable and rigid telescoping extension pole, one person can easily conduct testing in any direction. Many times industrial hygienists and safety professionals are faced with testing in confined spaces that are not accessed from the top. Even with topside entry, it is advantageous at times to conduct testing at angles other than vertical. Remote testing at angles, horizontally or even vertically upward is possible at distances over 6 ft. (2 meters) away. Made of non-conductive, corrosion-resistant fiberglass, the pole is lightweight and rugged.



Contracts to 18 inches (46 centimeters)  
for easy transport.



## ■ Tube Magnifier

P/N NX90171

If you are reading tubes in a non-lit or poorly lit area, or you just need a better view when reading the concentration of the tube; the Nextteq Tube Magnifier is the solution. The Magnifier automatically lights when the tube is inserted allowing clear visibility of the tube's concentration area. The Magnifier is lightweight and easy to transport to area of sampling. Requires two AA batteries and is not intrinsically safe.





### ■ VeriFit® Irritant Smoke Generators for Respirator Fit Testing

P/N 50811000-310N (10 pack)

P/N 90095 (6 pack)

Each package of VeriFit® Irritant Smoke Generators includes the following:

- Ten (10) or Six (6) Smoke Generators (each a complete fit testing kit)
- One (1) Durable Recyclable Storage Box
- One (1) Comprehensive Manual

Unlike other test methods, there is no need for nebulizers, pumps, mixing jars, batteries, test masks, probes or hoods with VeriFit Irritant Smoke Generator.



### ■ Nextteq Irritant Smoke Tube Kit for Respirator Fit Testing

P/N NX9500

Featuring Irritant Smoke Tubes, this qualitative respirator fit test provides a fast, safe, and reliable method to meet OSHA 29 CFR 1910.134. These test kits are always ready to use and do not require mixing or additional equipment. Kits contain everything needed for testing, including 10 irritant smoke tubes, aspirator bulb, tube tip breakers, 4 rubber end caps, tube protectors, manual and carrying case.



### ■ Nextteq Non-Irritant AirFlow Test Kit

Test Kit P/N 2106 contains:

6 non-corrosive smoke tubes, aspirator bulb with tubing, rubber stoppers, manual and carrying case.

Nextteq AirFlow Replacement Tubes P/N NSTOX1002106 contains:  
6 non-corrosive smoke tubes

Nextteq AirFlow Test Kits are always ready to use and do not require mixing or additional equipment. Kits contain everything needed for testing, including 6 non-corrosive smoke tubes. Analyzing air currents is simple and economical using Nextteq's AirFlow Test Kit. The non-corrosive smoke is safe for use in isolation room testing, ventilation ducts, and other environments. To maximize efficiency, tubes can be plugged with the supplied rubber stoppers, and reused at other test sites.

# Nextteq Accessories and Products At-A-Glance

## ■ Nextteq's Line of Personal/Area Sampling Pumps – Industrial Hygiene Applications

Personal Sampling Pumps are worn by workers during the work shift to determine exposure to ambient particulates, gases or vapors. The pumps can be used to determine concentrations of contaminants in a particular workspace and as area monitors. They draw a known controlled volume of air through detector tubes or collect contaminants through collection media (sorbent tubes, cassettes, etc.) over a period of time. Media is then sent out to a laboratory for analysis resulting in a calculated level of exposure. Nextteq's line of personal/area sampling pumps includes 3 pumps: NX-300, the NX-1200, and the NX-5000 allowing users to select the ideal pump for their application with specifications over a wide variety of sampling conditions. All pumps are diaphragm style pumps that are temperature compensated and programmable.



Pump Model Name	Part Number	Flow Range	Back Pressure Compensation	Accuracy	Operating Temp/ Humidity	Battery Operating Time
NX-300	NX-300-100	10 - 300 mL/min	up to 120" H2O at 100 mL/min	±5% or 5 mL/min whichever is greater	32-104°F (0-40°C) /10-90% RH	10 mL/min:>10 hrs 100 mL/min:>10 hrs 300 mL/min:>7 hrs (Alkaline)
NX-1200	NX-1200-100	10 - 1200 mL/min	–	±5% or 5 mL/min whichever is greater	32-104°F (0-40°C) /10-90% RH	1200 mL/min:=12 hrs (Alkaline)
NX-5000	NX-5000-100	50 - 5000 mL/min	up to 40" H2O at 100 to 2000 mL/min	±5% or 5 mL/min whichever is greater	32-104°F (0-40°C) /10-90% RH	100 mL/min:>24 hrs 1000l/min:>18hours (NiMH)

## ■ Nextteq Sorbent Tubes Nextteq is now offering a new line of sorbent tubes.

These high quality sealed glass tubes are packed with accurately weighed, high purity coconut shell charcoal. They are designed to absorb vapors and gases passed through them when used with low flow air sampling systems like the NX-300 and NX-1200.

In addition to charcoal tubes, Nextteq also has available tubes with various media including: Chromosorb, Anasorb, Florisil, Microlite, Porapak®, Silica Gel, Tenax®, XAD, and others.

For a complete listing of all Sorbent Tubes or bulk orders, please contact Nextteq International customer service at (877) 312-2333.





## Nextteq New Portable Gas Detectors

### Single Gas and Multi Gas Applications

Protect against a wide range of industrial gas hazards with Nextteq's new single gas monitors and Nextteq's new multi-gas monitor for personal monitoring and portable safety applications. Select the right solution depending on the number and type of gas sensors you need.



**Single Gas** – The NXS series is Nextteq's single gas detector that operates continuously for two years without replacement of the battery or gas sensor. It measures a gas continuously and displays its concentration and raises an alarm when a risk occurs. After two years, simply toss and get a new monitor for another two years! The optional IR link can download 30 events – alarm time and concentration.

Model	NXS-H2S	NXS-CO	NXS-O2	NXS-SO2	NXS-NH3	NXS-H2	NXS-NO2	NXS-CL2
Part Number	NX90201	NX90202	NX90203	NX90204	NX90205	NX90206	NX90207	NX90208
Gas	H2S	CO	O2	SO2	NH3	H2	NO2	CL2
Range	0-100ppm	0-500ppm	0-30% Vol	0-20ppm	0-100ppm	0-1000ppm	0-20ppm	0-20ppm
Approvals	Intrinsically Safe : IECEx, ATEX, CSA, InMetro, UL							

**Multi Gas** – The Multi Gas series is a diffusion gas monitor that simultaneously detects up to four gases, including hydrogen sulfide (H2S), carbon monoxide (CO), oxygen (O2) and combustibles (LEL). Alarms three ways: visual, vibrating, and audible when the risk occurs. CO and H2S is a dual sensor.

- Small and lightweight
- 30 Events (Alarms/Bump Tests/Calibration/Data)
- Simultaneously detects 4 different gases
- 60 days use with one charge for 4-6 hours
- Configuration via exclusive IR Link
- Easy check and calibration via Docking Station
- Combustible (LEL) available with either IR Sensor (P/N NX90221) or Catalytic Bead Sensor (P/N NX90222).



Model	NXM – H2S CO O2 LEL			
Part Number	NX90221, NX90222			
Gas	H2S	CO	O2	LEL
Range	0-100ppm	0-500ppm	0-30% Vol	0-100%
Approvals	Intrinsically Safe: IECEx, ATEX, CSA, InMetro, UL			

## Nextteq NX-IR-Link

### PC Interface for NXS and NXM Portable Gas Detectors



P/N NX90182  
The NX-IR-Link is used with the NXS and NXM portable gas detectors and calibration systems. The NX-IR-Link is used for configuration of your Nextteq devices, firmware updates and data logging.

## NXS and NXM Docking Station



P/N NX90225  
Docking Station for Single Gas Monitors (NXS)

P/N NX90226  
Docking Station for Multi Gas Monitors (NXM)

The Nextteq Docking Station provides bump testing, event management and calibration.



BETTER TECHNOLOGY. BETTER QUALITY.  
BETTER VALUE.

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January 2020 1st Edition, Nextteq Gas Detection  
System Detector Tube Guide  
P/N NX90156

All information exhibited in this document including but not limited to features, detector tube specifications, appearances and usage are subject to change without notice. Please refer to the instruction sheet in the box of tubes on the use of each detector tube.

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Nextteq International LLC  
website <https://www.nextteq.com>  
8406 Benjamin Rd Ste J, Tampa, FL 33634  
Tel: 813-249-5888  
Toll Free: 877-312-2333  
Fax: 813-249-0188  
Toll Free Fax: 877-312-2444  
Email: [info@nextteq.com](mailto:info@nextteq.com)

Printed in the United States of America