



# Colorimetric Gas Detection Tubes & Pump

On-the-spot, compound-specific  
measurement of gases and vapors



RAE Systems colorimetric gas detection tubes enable quick, on-the-spot measurement of a wide range of toxic and combustible gases and vapors. RAE Systems tubes are easy to read, and provide a sharp, clear color change directly corresponding to the concentration of gas present. RAE Systems tubes are compatible with the RAE Systems piston hand pump, a reliable way to draw samples of an exact volume required for the most accurate measurements.

## KEY FEATURES

### Colorimetric Tubes

*(See Colorimetric Tubes Part Numbers on back page)*

- Wide assortment of tubes available to detect over 300 gases and vapors
- Easy to use, even in multiple layers of gloves
- Easy-to-read with sharp, clear color change
- No calibration or other maintenance required

### Hand Pump (LP-1200)

*(Piston Hand Pump Kit Part Number: 010-0001-000)*

- Ergonomic, durable hand pump
- Solid metal construction with lifetime warranty
- Springless piston design accurately draws 50 and 100 cc volumes

## APPLICATIONS

- Oil and gas
- Chemicals and petrochemicals
- Agriculture and pest control
- Food and beverage production
- Environmental protection
- Fire service
- HazMat response
- National security

- **Quick, accurate, low-cost measurements**
- **Easy to read, with sharp, clear color change**
- **No calibration needed**



First responder uses RAE Systems colorimetric tubes and hand pump to measure VOC levels inside a barrel.



# Colorimetric Gas Detection Tubes & Pump



On-the-spot, compound-specific measurement of gases and vapors

## SPECIFICATIONS

Type	Part Number	Standard Range	Extended Range
Acetone	10-111-40	0.1 to 2%	0.05 to 4%
Amines	10-132-10	0.5 to 10 ppmv	0.25 to 20 ppmv
Ammonia	10-100-05	1 to 30 ppmv	0.5 to 60 ppmv
	10-100-10	5 to 100 ppmv	2.5 to 200 ppmv
	10-100-12	10 to 260 ppmv	5 to 520 ppmv
	10-100-15	25 to 500 ppmv	12 to 1000 ppmv
	10-100-40	1 to 15%	0.5 to 30%
Benzene	10-101-01*	0.5 to 10 ppmv selective	0.25 to 30 ppmv
	10-101-10*	5 to 40 ppmv selective	2.5 to 200 ppmv
	10-101-20	5 to 100 ppmv	2.5 to 200 ppmv
Butadiene	10-135-04	0.5 to 5 ppmv	0.25 to 10 ppmv
n-Butane	10-137-30	25 to 1400 ppmv	12.5 to 2800 ppmv
Carbon Dioxide	10-104-30	300 to 5000 ppmv	150 to 10,000 ppmv
	10-104-40	0.05 to 1%	0.025 to 2%
	10-104-45	0.25 to 3%	0.125 to 6%
	10-104-50	1 to 20%	0.5 to 10%
	10-104-60	5 to 40%	1.25 to 20%
Carbon Monoxide	10-102-18	5 to 100 ppmv selective	2.5 to 300 ppmv
	10-102-20	5 to 100 ppmv	2.5 to 200 ppmv
	10-102-30	20 to 500 ppmv	10 to 1000 ppmv
	10-102-45	0.2 to 4%	0.4 to 8%
Chlorine	10-106-10	0.5 to 8 ppmv	0.25 to 16 ppmv
	10-106-20	5 to 100 ppmv	2.5 to 200 ppmv
Chlorine Dioxide	10-130-10	0.25 to 15 ppmv	0.05 to 30 ppmv
Diesel & Jet Fuel	10-143-10	0.5 to 25 ppmv	N/A
Ethanol	10-141-30	100 to 2000 ppmv	50 to 2000 ppmv
Formaldehyde	10-121-05	0.1 to 5 ppmv	0.1 to 40 ppmv
Gasoline	10-138-30	30 to 1000 ppmv	15 to 2000 ppmv
Hydrocarbons	10-110-30	50 to 1000 ppmv	25 to 2000 ppmv
Hydrogen Chloride	10-108-09	1 to 20 ppmv	0.5 to 40 ppmv
	10-108-10*	1 to 20 ppmv w/ desiccant	0.5 to 40 ppmv
	10-108-22	20 to 500 ppmv	10 to 1000 ppmv
Hydrogen Cyanide	10-126-10	2.5 to 60 ppmv	1.25 to 120 ppmv
Hydrogen Fluoride	10-105-10	0.5 to 20 ppmv	0.25 to 40 ppmv

Type	Part Number	Standard Range	Extended Range
Hydrogen Sulfide	10-103-04	0.2 to 3 ppmv	0.1 to 6 ppmv
	10-103-05*	0.2 to 3 ppmv w/ desiccant	0.1 to 6 ppmv
	10-103-06	1 to 7 ppmv	0.25 to 7 ppmv
	10-103-10	2.5 to 60 ppmv	1.25 to 120 ppmv
	10-103-12	10 to 120ppmv	5 to 240ppmv
	10-103-15	10 to 120 ppmv	5 to 240 ppmv
	10-103-18	25 to 250 ppmv	12.5 to 500 ppmv
	10-103-20	50 to 800 ppmv	25 to 1600 ppmv
	10-103-30	100 to 2000 ppmv	50 to 4000 ppmv
	10-103-40	0.1 to 2%	0.05 to 4%
10-103-50	2 to 40%	0.5 to 20%	
MEK	10-113-20	0.02 to 0.6 %	0.01 to 1.8 %
Mercaptans	10-129-20	5 to 120 ppmv	2.5 to 240 ppmv
Methyl Bromide	10-131-10	1 to 18 ppmv	0.5 to 36 ppmv
	10-131-30	20 to 300 ppmv	40 to 600 ppmv
Nitric Acid	10-146-20	1 to 20 ppm	0.5 to 40 ppm
Nitrogen Dioxide	10-117-10	0.5 to 30 ppmv	N/A
Nitrogen Oxides	10-109-20*	1 to 50 ppmv	0.5 to 100 ppmv
Ozone	10-133-03	0.05 to 0.6 ppmv	0.15 to 1.8 ppmv
Phenol	10-139-05	1 to 25 ppmv	0.5 to 180 ppmv
Phosphine	10-116-10	5 to 50 ppmv	2.5 to 100 ppmv
	10-116-20	25 to 500 ppmv	12.5 to 1000 ppmv
	10-116-25	50 to 1000 ppmv	25 to 2000 ppmv
Sulfur Dioxide	10-107-15	2 to 30 ppmv	1 to 60 ppmv
	10-107-20	5 to 100 ppmv	2.5 to 200 ppmv
	10-107-25	100 to 1800 ppmv	50 to 3600 ppmv
	10-107-30	200 to 4000 ppmv	50 to 4000 ppmv
	10-107-40	0.2 to 5 %	0.1 to 10 %
Toluene	10-114-20	10 to 300 ppmv	5 to 600 ppmv
Trichloroethylene	10-119-20*	5 to 100 ppmv	2.5 to 230 ppmv
Vinyl Chloride	10-128-10*	1 to 20 ppmv	0.5 to 40 ppmv
Water Vapor	10-120-10	2 to 10 lbs/MMCF (0.03 to 0.16 mg/L)	1 to 20 lbs/MMCF
	10-120-20	6 to 40 lbs/MMCF (0.1 to 0.64 mg/L)	3 to 80 lbs/MMCF
	10-120-30	0.05 to 1 mg/L	0.025 to 2 mg/L
	10-120-40	1 to 18 mg/L	0.5 to 32 mg/L
	10-112-20	10 to 200 ppmv	5 to 400 ppmv

\* Box contains 5 colorimetric tubes and 5 pre-tubes, for a total of 5 measurements. Other boxes contain 10 colorimetric tubes.