

Colorimetric Gas Detection Pump and Tubes

Reliable toxic and flammable gas measurements.

Introduction

United Safety applies RAE Systems colorimetric gas detection tubes for 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

- Wide assortment of tubes available for different gases.
- Easy to use, even in multiple layers of gloves.
- Easy to read, with sharp, clear colour change.
- No calibration or other maintenance required.

Hand Pump (LP - 1200)

- Ergonomic, durable hand pump.
- Solid metal construction with lifetime warranty.
- Springless piston design accurately draws.

Key Benefits

- More accurate than other comparable multigas tube-style detectors (+ /- 12.5% error instead of +/- 25% error potential in most other pumps).
- Extended ranges allow the safety hand to match the tube range to the current concentration more effectively.
- Wide variety of tubes for different gases, with extended ranges available within each tube.
- Simple and robust - no rubber baffles to leak.



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Type Part	Number standard	range Extended	range
Acetone	10-111-40	1 to 2%	0.05 to 0.05
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	25 to 200 ppmv
	10-101-20	5 to 100 ppmv selective	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 1000ppmv	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 Sulphide	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 125 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	0.10% 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
Xylene	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.