

Calibration gas mixtures for breath analysis and lung function equipment Non-refillable canisters

Non-refillable canisters:

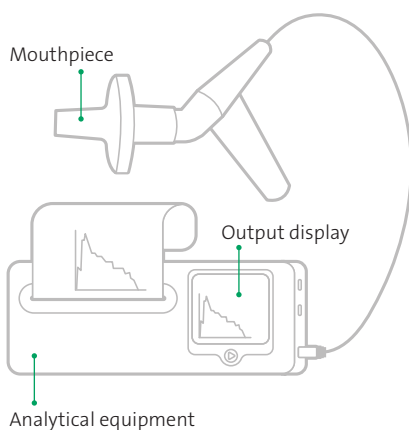
- Ideal compromise between gas capacity and portability
- Fast and efficient delivery
- Certificates of Analysis supplied as standard
- Customised product labelling available



Air Products market leading Experis® gas mixtures offering includes a range of calibration and test gas mixtures for breath analysis and lung function equipment.

Lung function

- **Spirometry** – Used to assist the diagnosis and monitoring of specific lung conditions by measuring the volume of air exhaled in a single breath. Typically used to identify asthma, pulmonary fibrosis, cystic fibrosis and Chronic Obstructive Pulmonary Disease (COPD).



Lung function,
Spirometry schematic

Breath analysis

- **Carbon monoxide** – Typically measured by the emergency services to detect carbon monoxide poisoning, or by medical and healthcare professionals during smoking cessation tests.
- **Hydrogen breath test (HBT)** – Used as a diagnostic tool identifying food disorders such as lactose/fructose intolerance, carbohydrate malabsorption and small intestinal bacterial conditions.
- **Fractional exhaled nitric oxide (FeNO)** – Measured to help diagnose asthma.

Manufacturers of breath and lung function analysis equipment recommend different calibration gas mixtures for their equipment. This is to ensure the apparatus produces precise measurements for each patient test. Air Products is able to supply these mixtures, which are traceable to national standards in non-refillable canisters.

Stability and shelf life – peace of mind

Gas mixture stability and shelf life are critical for reliable and accurate calibration of all medical equipment. The Air Products Experis® gas mixture range guarantees stability of up to 5 years. This is made possible by using advanced canister preparation techniques, high integrity filling manifolds and the use of ultra-high purity raw materials. This ensures that you can have peace of mind when carrying out patient tests.



Canister specification

	Aerosol	34L	58L	110L
Water capacity	1.0L	0.9L	1.72L	1.6L
Pressure	10 Bar	34 Bar	34 Bar	69 Bar
Dimensions (height x diameter)	265mm x 73mm	283mm x 74mm	357mm x 89mm	358mm x 90mm
Empty weight	108g	474g	731g	1160g
Valve outlet	7/16" (28 NS/2 Male)	5/8" (18UNF C10)	5/8" (18UNF C10)	5/8" (18UNF C10)
Regulatory compliance	75/324/EEC DOT* 39	ISO 11118 and EN 13340 π marked DOT* 39	ISO 11118 and EN 13340 π marked DOT* 39	ISO 11118 and EN 13340 π marked

*US Department of Transport (DOT)






Product codes for common gas mixtures

Composition	Aerosol	34L	58L	110L
20 ppm CO // Synthetic air	312000	313106	312723	312027
50 ppm CO // Synthetic air	312085	312896	313459	312039
100 ppm H ₂ // Synthetic air	314503	314054	325697	313430
200 ppm H ₂ // Synthetic air	312108	315065	314329	314406
10 ppm NO ₂ // Synthetic air	✗	312215	312214	312674
25 ppm NO // Nitrogen	✗	312972	312240	312971

Air Products also supply calibration gas mixtures in larger refillable cylinders – ideal for applications where greater gas volumes are required.

Gas control equipment

To compliment our range of calibration and test gases, we offer a wide range of gas control equipment, developed specifically for non-refillable canisters. Please contact us for information on the full range.

Type	Description	Product number	Compatibility			
			Aerosol	34L	58L	110L
 Fixed-flow regulator (plated brass)	These are preset to deliver gas at a fixed flow rate. The standard offered is 1.0 lpm, others are available including 0.3, 0.5, 1.5 and 2.5 lpm. The pressure gauge shows canister contents and a short length of polyurethane tubing is supplied.	198842: 1.0 lpm	✗	✓	✓	✓
 Mini-flow valve	A plated brass control valve with a flow meter and a barbed outlet connection, suitable for a length of polyurethane tubing. Unit allows the user to control the flow of gas by adjusting a knurled knob on top of the valve. The standard unit has a flow range of 0.5-1.5 lpm, higher flow ranges are also available upon request.	198485: 0.5–1.5 lpm	✓	✗	✗	✗
 S-flow valve	Offers a more precise setting of adjustable flow rates than the Mini-flow valve. Featuring an integral flow adjustment valve and a clearly marked graduated flow meter for ease of use, a pressure gauge indicates canister contents.	198252: 0–1 lpm	✓	✗	✗	✗

For more information please contact us at:

Air Products PLC
T 0800 389 0202
E apukinfo@airproducts.com
airproducts.co.uk

Air Products Ireland Ltd.
T 1800 99 50 29
E ieinfo@airproducts.com
airproducts.ie



tell me more
airproducts.co.uk
airproducts.ie