

Summary DETECTAGAS® cylinders are disposable or refillable gas mixtures for the calibration and bump testing of fixed and portable gas detector monitors for industrial hygiene purposes. These systems are used to monitor gases in the air to ensure a workplace is safe from toxins and flammable or explosive atmospheres for employees, contractors and visitors.

Key Legislation [AS/NZS 2865 - Confined Spaces](#)

This standard outlines the requirements and procedures to ensure the health and safety of any persons required to enter or work in a confined space.

For the purposes of this standard, a person whose head (i.e. the breathing zone or upper body) is within a confined space is considered to have entered the confined space

[AS/NZS 61779 – Electrical apparatus for the detection and measurement of flammable gases](#)

Guide for the selection, installation, use and maintenance of apparatus for the detection and measurement of flammable gases.

Under section 9.2.2 (Portable and transportable gas detection apparatus), subsection b (Response (sensitivity) checks and calibrations):

Regarding calibration, portable and transportable gas detection apparatus should be:
(iv) Response tested (or re-calibrated) immediately before each occasion of use.

Common Mixtures

MIXTURE	SIZE	PART NUMBER
Air Zero	100L	294130703NR
50ppm ammonia in nitrogen	58L	294228305NR
2% carbon dioxide in nitrogen	100L	294218103NR
3% carbon dioxide in nitrogen	100L	294334203NR
0.5% hydrogen in air	100L	294211503NR
2% hydrogen (50% LEL) in air	100L	294218203NR
10ppm hydrogen cyanide in nitrogen	58L	294216005NR
10ppm hydrogen sulfide in nitrogen	116L	294215802NR
25ppm hydrogen sulfide, 100ppm carbon monoxide, 2.5% methane (50% LEL), 18% oxygen in nitrogen	34L	294513810NR
	58L	294513805NR
	116L	294513802NR
25ppm hydrogen sulfide, 100ppm carbon monoxide, 3500ppm pentane (25% LEL), 18% oxygen in nitrogen	116L	294531802NR

Other mixture components include Chlorine, Ammonia, Hydrogen Chloride, Carbon Monoxide, Ethylene Oxide, Nitrogen Dioxide, Nitric Oxide, Ethanol, Hydrocarbons (including LEL or UEL for Pentanes Propane, etc), Halocarbons, Hydrogen and Oxygen.

Product Specification

	REACTIVE COMPONENTS	NON-REACTIVE COMPONENTS
Uncertainty	Batch Tested ±5% preparation tolerance	Batch Tested ±5% preparation tolerance
Shelf Life	6-24 months	12-36 months
Cylinder Sizes	34L, 58L, 100L and 116L	34L, 58L, 100L and 116L



Common Industries



Oil rigs and platforms, oil refineries, petrochemical plants, steel industry, fire brigades, storage areas, power generation sites, waste disposal on landfill sites and mining industry.

Common Detectors

PORTABLE PROTECTION EQUIPMENT

- Personal monitor
- Flammable monitor

FIXED PROTECTION EQUIPMENT

- Single or Multi head detection monitor
- Carbon Dioxide monitor

Catalytic Sensory System

Used for flammable gas detection in the monitoring of the Lower Explosive Limit (LEL) and Upper Explosive Limit (UEL).

Electrochemical Sensory System

Used for the detection of toxic gases and oxygen levels.

Infra-red Absorption Sensory System

Uses Infra-red radiation to detect a range of components, including Carbon Dioxide (CO₂), Carbon Monoxide (CO) and Methane (CH₄).

Benefits

- Common products now stocked in New Zealand reducing lead times and freight costs
- In-house testing of Hydrogen Sulfide (H₂S) for guaranteed stability
- Every cylinder is quality tested and fully NIST traceable
- Gases analysed to ISO 17025 and ISO 17034 are available at an additional cost
- Returnable cylinders for recycling to reduce environmental impact

Regulators

Preset Constant Flow Regulators

With unique diaphragm technology, these regulators will hold their preset flow, even as the cylinder pressure is depleted.

Demand Flow Regulators

Designed for the Environmental and Industrial Hygiene markets for instruments with sample draw pumps this regulator overcomes the inconvenience of using sample bags or T-assemblies ensuring sensor repeatability.

100 SERIES

- Passivated coating suitable for reactive components
- Constant Flow Regulator
- C-10 or CGA 600 inlet type
- Multiple outlet fittings available
- Passivated nickel plated construction
- 0.25, 0.4, 0.5 and 1.0 liter per minute fixed flow rate

300 SERIES

- Stainless Steel diaphragm
- Demand Flow Regulator
- C-10 or CGA
- 3/16" hose barb outlet fitting
- Nickel plated brass
- 0.25 to 10 liter per minute (variable)

For more information, contact your local Scientific Specialist or our dedicated Scientific Customer Engagement Centre on 0800 100 949 or scientificNZ@boc.com.