

# Headspace analysis in Modified Atmosphere Packaging (MAP) Non-refillable canisters



Air Products' market leading Freshline® gases are used extensively in food packaging to extend product shelf life for a diverse range of products from salads and cheeses, through to meats and bakery products, plus many others.



Air Products has many years' experience and applications knowledge in MAP. We understand the importance of headspace gas analysis in the quality control (QC) process. Our range of non-refillable canisters, part of our leading Experis® gas range, is ideal for supplying the certified gas mixtures needed for the calibration of your analytical equipment.

- Ideal for low volume applications
- Extremely portable and easy to use
- Long shelf life - 60 months
- Certificate of Analysis supplied as standard
- Fast supply and delivery
- Free OEM label personalisation.

The most common mixtures used in MAP headspace analysis are available as standard products with no minimum order quantities, and include:

Product code	Mixture	Canister
321075	30 % Carbon Dioxide // Nitrogen	110L
328082	40 % Carbon Dioxide // Nitrogen	110L
344391	50 % Carbon Dioxide // Nitrogen	110L
329129	60 % Carbon Dioxide // Nitrogen	110L
315975	80 % Carbon Dioxide // Nitrogen	110L
323432	18 % Carbon Dioxide // Argon	110L
323433	30 % Carbon Dioxide // Argon	110L
313165	0.8 % Oxygen // Nitrogen	110L
312038	5 % Oxygen // Nitrogen	110L
312016	20.9 % Oxygen // Nitrogen	110L
197140	100 % Nitrogen (5.0 Grade)	110L
197136	100 % Carbon Dioxide (3.0 Grade)	110L
410533	100 % Argon (5.2 Grade)	110L



110L canister dimensions  
364mm (h) x 88mm (d)



The above products are available as 58L canisters, minimum order quantities may apply.

## Canister specification

	58L	110L
Water capacity	0.85 litres	1.7 litres
Pressure	69 bar	69 bar
Dimensions (height x diameter)	278mm x 75mm	364 mm x 88 mm
Empty weight	620 g	1160 g
Valve outlet	5/8" (18 UNF C10)	5/8" (18 UNF C10)
Material	Aluminium alloy	Aluminium alloy
Regulatory compliance	ISO 11118 π marked	ISO 11118 π marked

## Gas control equipment

Flow regulators are also available as a complement to the non-refillable canister range, these have been specifically selected for MAP headspace calibration application.

Type	Description	Product code
 Fixed flow regulator	These stainless steel units are pre-set to deliver gas at a fixed flow rate. The pressure gauge shows the canister contents. The hose tail outlet accommodates a short length of polyurethane tubing (supplied) which can be used to connect to the instrument.	198483 : 0.3 lpm 197943 : 0.5 lpm 197941 : 1.0 lpm 197942 : 1.5 lpm
 Demand flow regulator	Designed for instruments fitted with a pump. The regulator's flow matches that demanded by the instrument. Removes the requirement for separate accessories, such as T-pieces and sampling bags, avoiding wasted gas. The pressure gauge shows the canister contents. Hose tail outlet suitable for connection to polyurethane tubing (supplied).	402214 : 0-5.0 lpm

Alternative regulators are also available.

### For more information please contact us at:

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