

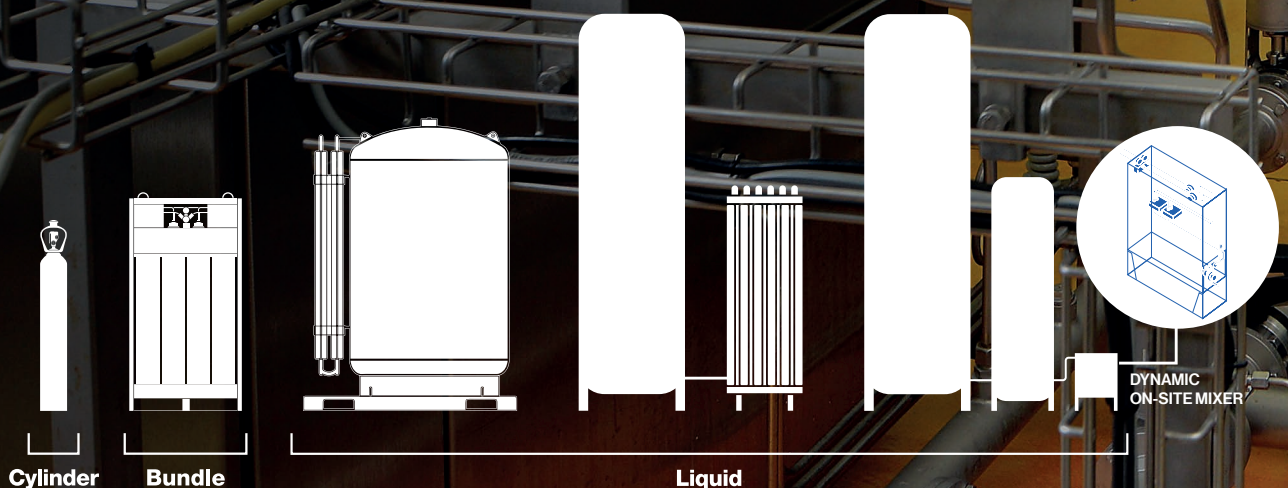
Premium Gases to preserve Food Quality



Pioneers in food and beverage-grade gases

Air Liquide is a leading international gas supplier with innovative solutions to address the most challenging food productivity issues. With over 50 years of experience in food and beverage processing, Air Liquide has been a pioneer in the development of food and beverage-grade gases for industry. Our **ALIGAL™** premium gas products have been specifically developed in order to meet the food safety and quality standards throughout the world.

ALIGAL™ is our range of gas products that complies with industry standards. The **ALIGAL™** brand ensures that a food safety management system based upon HACCP* principles is applied throughout all stages of the production process and supply chain, and also includes a highly effective traceability system in order to provide peace-of-mind to both the processor and the final consumer.





	Composition (%)				Modified Atmosphere Packaging	Cryogenics	Other Food Processing Applications	Carbonation	Beverage Processing	Winemaking
	N ₂	CO ₂	O ₂	Ar						
ALIGAL™ 1	100				•	•	•		•	•
ALIGAL™ 2		100			•	•	•	•	•	•
ALIGAL™ 3			100		◊				•	•
ALIGAL™ 6				100	•					•
ALIGAL™ 13	70	30			•					•
ALIGAL™ 15	50	50			•					•
ALIGAL™ 28		20	80		•					

◊ = Aligal 3 is available for the on-site mixing of Aligal 28

What makes **ALIGAL™** so unique?

Food Safety and Quality

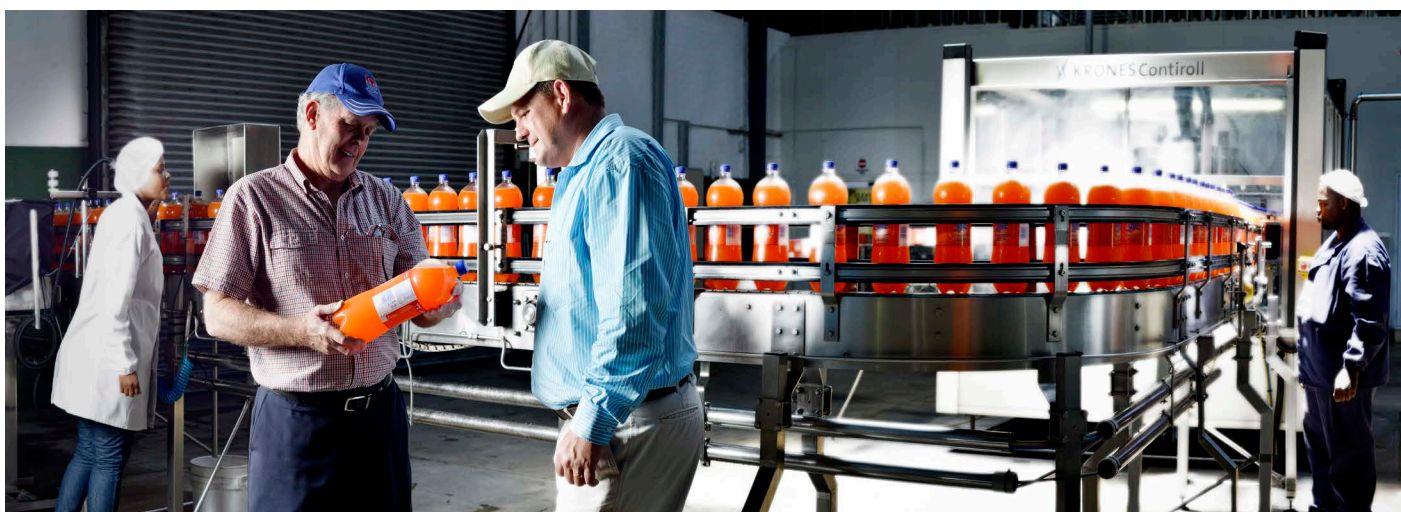
Each **ALIGAL™** product conforms to local food and beverage regulations and to the same minimum Air Liquide specifications and manufacturing standards used worldwide. **ALIGAL™** ensures that the complete process from production to delivery follows HACCP* principles.

ALIGAL™ 2 for carbonation, follows the requirements of the Australian Food Standards Code and is produced at Air Liquide's FSSC 22000** certified CO₂ production facilities.

Expertise You Can Depend On

With extensive experience in the industry, our dedicated team of food and beverage specialists will make the most of Air Liquide's R&D capabilities and application know-how in order to support you.

Based upon our knowledge of the gas interactions with food and beverage products, our process experts can design comprehensive solutions which will optimise your product quality and process efficiency in order to minimise your overall operational costs.



*Hazard Analysis and Critical Control Points

**Most production sites are certified with Food Safety System Certification 22000

Reliable, Continuous Supply

With **ALIGAL™** you can rely on the same product quality, consistency and reliability, anywhere in the world.

ALIGAL™ is available in various supply modes ranging from high pressure gas cylinders up to bulk liquid storage tanks for larger quantities, along with an option for on-site gas mixing. The **ALIGAL™** mode of supply can be easily adapted to meet your changing gas requirements.



There's an **ALIGAL™** product for your particular processing need:

Food

ALIGAL™ is a natural food processing solution that doesn't alter the original composition of the product.

Modified Atmosphere Packaging (MAP)

ALIGAL™ products have been specially formulated for MAP applications to address the particular shelf life requirements for a variety of food products. **ALIGAL™** helps to preserve the original appearance, colour, flavour and nutritional attributes of your fresh food products by preventing spoilage from oxidation and by slowing down the potential growth of bacteria and mould.

Cryogenic Freezing and Chilling

The cryogenic properties of **ALIGAL™** gases are ideally suited for chilling, freezing, crust-freezing, individual quick freezing (IQF) and temperature control applications. **ALIGAL™** products reduce dehydration losses, minimize bacterial growth and freeze or chill at a faster rate than traditional refrigeration solutions in order to better preserve the product's original texture, colour, flavour and nutritional attributes.

Other Food Applications

The properties of **ALIGAL™** gases are also ideal for protecting edible oils from oxidation, cryo-grinding food materials into powders, adjusting the pH in dairy products, aerating mousse products and the stabilisation of food ingredients.



Supporting food producers from start to finish

Beverages

Carbonation

ALIGAL™ 2 for carbonation is produced to FSSC 22000 standards in order to meet the stringent requirements of the beverage industry.

Beverage Processing

ALIGAL™ gases provide an all-natural solution to support product quality by reducing and minimising dissolved oxygen levels in order to prevent oxidation damage and to preserve the original vitamin and nutrient content.

Winemaking

ALIGAL™ products can be used at many stages throughout the winemaking process in order to optimise the dissolved oxygen and carbon dioxide levels to protect the wine's quality from the vine to the glass, to minimise the use of chemical preservatives like sulphur dioxide and to preserve the greatness of the finest vintages.



Protecting beverage taste, color and texture.

Air Liquide's Industrial Merchant Business Line delivers industrial gases and innovative solutions, including application technologies, equipment and services. From independent professionals to large industrial companies, our 65,000 employees serve over 3 million customers and patients daily across 80 countries. They use their unmatched business and technical capabilities to develop gas solutions that boost the performance of industries and help them to increase product quality, unlock greater competitiveness and minimise the environmental footprint of their manufacturing processes.

Contact us

Air Liquide Australia
Level 9, 380 St Kilda Road
Melbourne, VIC 3004
www.airliquide.com.au

Air Liquide New Zealand
19 Maurice Road
Penrose, Auckland 1642
www.airliquide.co.nz



The world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 80 countries with approximately 65,000 employees and serves more than 3 million customers and patients.