

# **Food-Grade Gases Market by Type (Carbon Dioxide, Nitrogen, Oxygen), Application (Freezing & Chilling, Packaging, Carbonation), End-Use (Dairy & Frozen Products, Beverages, Meat, Poultry & Seafood), and Region - Global Forecast to 2025**

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## **Abstracts**

“The food-grade gases market is projected to grow at a CAGR of 6.7%.”

According to MarketsandMarkets, the global food-grade gases market is estimated to be valued at USD 6.7 billion in 2020 and is projected to reach USD 9.3 billion by 2025, at a CAGR of 6.7% from 2020 to 2025. The market is driven by factors such as the growing demand for convenient food packaging, owing to the on-the-go lifestyles of customers and the growing number of microbreweries across all regions. Stringent government regulations to meet quality standards inhibit the growth of the food-grade gases market.

“By type, the carbon dioxide segment is projected to witness the fastest growth during the forecast period.”

The carbon dioxide segment is estimated to grow at the highest CAGR due to growing demand from the carbonated beverages industry across the globe. Carbon dioxide is used for refrigeration and cooling in solid (dry ice) and liquid forms; this is because it sublimates to gas at a very low temperature of -78.5 °C (-109.3 °F). It is widely used for carbonation in soft drinks, beers, and other alcoholic drinks.

Carbon dioxide is also used in Modified Atmosphere Packaging (MAP) along with nitrogen because of its inert characteristic. Further, carbon dioxide is also being used in the softening of water to avoid corrosion problems in long water distribution lines, and

also in producing potable drinking water.

“By mode of supply, the bulk segment in the food-grade gases market is projected to grow at the highest CAGR during the forecast period.”

Based on mode of supply, the food-grade gases market is segmented into bulk and cylinder. The bulk mode of supply is usually preferred by large food & beverage manufacturers due to the ease of handling and storage it offers. The bulk mode of supply of food-grade gases is also cost efficient than when the gases are offered in cylinders.

Carbon dioxide and nitrogen are the most commonly supplied bulk gases because of their use in high volumes in soft drinks and food packaging. If an end-user requires gas for various processes, the liquid is first vaporized and then delivered as a gas through a supply pipe. If the processes require liquid, it is delivered directly from the storage vessel through a cryogenic vacuum-insulated pipeline. Almost all the key players offer bulk gases.

“Asia Pacific is projected to be the fastest-growing region in the food-grade gases market, due to the developing cold-chain infrastructure and changing consumer preference for packaged food products.”

The climatic conditions in the Asia Pacific region range from tropical to semi-tropical; and certain food products require proper refrigeration to prevent early spoilage. Also, in some of the developing countries in the region, the cold chain infrastructure is in the development phase. This is projected to drive the market for food-grade gases in the region. Rising consumer preference for packaged food products due to busy lifestyles is also one of the drivers of food-grade gases with applications in packaging. Further, key factors such as industrialization, growing middle-class population, rising disposable income, changing lifestyles, and the rising consumption of packed products are expected to drive the demand for food-grade gases during the forecast period.

The global food-grade gases market is segmented region-wise, with a detailed analysis of each region. These regions include North America, Europe, Asia Pacific, South America, and Rest of the World (RoW).

#### Break-up of Primaries

By Company Type: Tier 1 – 45 %, Tier 2 – 30%, and Tier 3 – 25%

By Designation: C-level – 40%, D-level – 25%, and Others\* – 35%

By Region: North America – 22%, Europe –22%, Asia Pacific – 34% and RoW\*\*  
– 22%

\*Others include sales managers, marketing managers, and product managers.

\*\*RoW includes the Middle East, and Africa.

Leading players profiled in this report include the following:

The Linde Group& Praxair, Inc. (Germany)

Air Products & Chemicals, Inc (US)

Air Liquide (France)

The Messer Group GmbH (Germany)

Taiyo Nippon Sanso (Japan)

Wesfarmers Ltd. (Australia)

SOL Group (Italy)

Gulf Cryo (Kuwait)

Air Water, Inc. (Japan)

Massy Group (Caribbean)

PT Aneka Industri (Indonesia)

National Gases Limited (Pakistan)

SIAD (Italy)

Cryogenic Gases (US)

Les Gaz Industriels Ltd. (East Africa)

Aditya Air Products (India)

Sidewinder Dry Ice & Gas (South Africa)

Axcel Gases (India)

Chengdu Taiyu Industrial Gases Co., Ltd (China)

Yingde Gas Group Ltd (China)

Siddhi Vinayak Industrial Gases Pvt Ltd (India)

American Welding & Gas (US)

IjsbariekStrombeek N.V (Belgium)

Air Source Industries (US)

Purity Cylinder Gases Inc. (US).

## Research Coverage

This report segments the food-grade gases market on the basis of type, mode of supply, end-use, application, and region. In terms of insights, this research report focuses on various levels of analyses—competitive landscape, end-use analysis, and company profiles—which together comprise and discuss the basic views on the emerging & high-growth segments of the food-grade gases market, high-growth regions, countries, industry trends, drivers, restraints, opportunities, and challenges.

## Reasons to buy this report

To get a comprehensive overview of the food-grade gases market

To gain wide-ranging information about the top players in this industry, their product portfolio details, and the key strategies adopted by them

To gain insights about the major countries/regions in which the food-grade gases market is flourishing

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