

Modified Atmosphere Packaging (MAP) Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)

> **Industry:** Flexible & Barrier Packaging (Packaging)
> **Source:** https://www.mordorintelligence.com/industry-reports/modified-atmosphere-packaging-market(https://www.mordorintelligence.com/industry-reports/modified-atmosphere-packaging-market)
> **Scraped Date:** 2026-09-17

Executive Market Summary

Market Metric	Details
Base Market Size	USD 20.68 billion
Projected Forecast (2031)	USD 20.68 billion
Growth Rate (CAGR)	8.82 %
Largest Market Region	N/A
Fastest-Growing Region	N/A

Market Visualizations & Infographics

!Major players in Modified Atmosphere Packaging (MAP) industry(images/chart_2.png)

!Modified Atmosphere Packaging (MAP) Market (2025 - 2030)(images/chart_3.png)

!Modified Atmosphere Packaging (MAP) Market: Market Share by Packaging Gas, 2025](images/chart_4.png)

!Modified Atmosphere Packaging (MAP) Market: Market Share by Application, 2025](images/chart_5.png)

!Modified Atmosphere Packaging (MAP) Market CAGR (%), Growth Rate by Region](images/chart_6.png)

!Modified Atmosphere Packaging Market Concentration](images/chart_7.png)

!Icon](images/chart_8.png)

!footer background image](images/chart_10.png)

!Mordor Intelligence on Facebook](images/chart_12.svg)

!Mordor Intelligence on Pinterest](images/chart_14.svg)

!Mordor Intelligence on Instagram](images/chart_15.svg)

!ESOMAR](images/chart_17.png)

!GPTW](images/chart_19.png)

Comprehensive Research Analysis

Overview Points List Flex 49 Share Feature End

Market Overview	Study Period	2020 - 2031
Market Size (2026)	USD 20.68 Billion	
Market Size (2031)	USD 31.56 Billion	
Growth Rate (2026 - 2031)	8.82 %	
Fastest Growing Market	Asia Pacific	
Largest Market	Asia Pacific	

Market Concentration | Medium |

Major Players*Disclaimer: Major Players sorted in no particular order

Image © Mordor Intelligence. Reuse requires attribution under CC BY 4.0.

|

Market Overview

Modified Atmosphere Packaging (MAP) Market Analysis by Mordor IntelligenceThe modified atmosphere packaging market size in 2026 is estimated at USD 20.68 billion, growing from 2025 value of USD 19.0 billion with 2031 projections showing USD 31.56 billion, growing at 8.82% CAGR over 2026-2031. Robust e-grocery expansion, stricter food-waste regulations, and rapid advances in smart sensors collectively reposition the modified atmosphere packaging market as a cornerstone of modern food-preservation logistics. Nitrogen remains the most widely used gas because of its inert properties and cost advantage, while carbon dioxide use accelerates in high-protein categories where antimicrobial action is critical. At the material level, polyethylene retains volume leadership, yet compostable films gain momentum as brand owners align with circular-economy mandates. Competitive intensity is moderate: no player exceeds a 15% share, but sustained R&D spending in IoT-enabled equipment is enabling mid-tier firms to challenge incumbents

Key Report Takeaways* By gas type, nitrogen led with 37.78% modified atmosphere packaging market share in 2025, whereas carbon dioxide is advancing at a 9.05% CAGR through 2031.

* By packaging material, polyethylene captured 28.96% of the modified atmosphere packaging market size in 2025, while compostable alternatives are forecast to grow 9.94% annually to 2031.

* By application, meat, poultry, and seafood accounted for 34.62% of the modified atmosphere packaging market size in 2025; meal-kit services are registering the highest 9.28% CAGR to 2031.

* By equipment type, tray-sealing machines held 31.63% of the modified atmosphere packaging market share in 2025, whereas vacuum-chamber units are expanding at 9.84% CAGR to 2031.

* By geography, Asia-Pacific commanded 38.22% revenue share in 2025 and remains the fastest-growing region at 10.11% CAGR through 2031.

Key Market Trends

Market Trends and InsightsDrivers Impact Analysis of Modified Atmosphere Packaging (MAP) Market*Driver | (~) % Impact on CAGR Forecast | Geographic Relevance | Impact Timeline |

Surge in e-grocery adoption requiring extended shelf-life | +1.5% | Global; strongest in APAC and North America | Medium term (2-4 years) |

Regulatory push to cut food waste | +1.2% | EU and North America, spillover to APAC | Long term (≥ 4 years) |

Emerging cold-chain infrastructure in Africa | +0.8% | Sub-Saharan and North Africa | Long term (≥ 4 years) |

Clean-label demand for minimally processed foods | +1.1% | North America, EU, urban APAC | Medium term (2-4 years) |

IoT-enabled dynamic MAP solutions | +0.9% | Global, technology-forward markets first | Short term (≤ 2 years) |

Growth in compostable MAP films | +0.7% | EU first-mover markets, expanding worldwide | Medium term (2-4 years) |

Source: Mordor Intelligence |

Competitive Landscape

Competitive Landscape

Tier-one multinationals Amcor, Sealed Air, and Linde each command 8-12% individu

al share, leaving roughly 60-65% fragmented among regional converters, gas suppliers, and equipment specialists. Vertical integration defines recent M&A activity: ProMach's acquisitions knit film, filling, and sealing assets into turnkey offerings that lower customer integration risk.[1]ProMach, "ProMach Acquires Texwrap Packaging Systems," promachbuilt.com

Innovation pipelines concentrate on sensor-laden pouches and machine-learning algorithms that predict residual-gas drift, pushing the modified atmosphere packaging market toward data-centric service models. Established players bundle gas supply contracts with equipment leases, creating sticky customer relationships and recurring revenue.

Smaller firms differentiate via application focus such as seafood-specific films or geography, leveraging localized distribution to outcompete multinationals on service responsiveness. Smart-equipment retrofits represent a fertile playing field, as brownfield plants seek to upgrade without wholesale line replacement. Patent filings in 2024 targeted bio-based barrier coatings and cloud analytics, validating the dual themes of sustainability and digitalization shaping the modified atmosphere packaging industry.

Modified Atmosphere Packaging (MAP) Industry Leaders* Sealed Air Corporation

- * Amcor PLC
- * Linde AG
- * Praxair Packaging Solutions LLC
- * Air Products and Chemicals Inc.

* *Disclaimer: Major Players sorted in no particular order
Image © Mordor Intelligence. Reuse requires attribution under CC BY 4.0.

Scope Methodology P Space

For this methodology, the modified atmosphere packaging market covers packaging solutions and related equipment that change or control the gas mix inside a pack to slow spoilage and extend shelf life, mainly for perishable foods across global end users.

Scope exclusions: It does not count conventional packaging that does not actively manage the internal atmosphere, and it excludes downstream cold chain services and retailing margins.

Segmentation Container

- * By Packaging Gas* Oxygen
- * Nitrogen
- * Carbon Dioxide
- * Other Packaging Gases
- * By Packaging Material* Polyethylene (PE)
- * Polypropylene (PP)
- * Polyethylene Terephthalate (PET)
- * Compostable
- * Other Packaging Materials
- * By Application* Fruits and Vegetables
- * Meat, Poultry and Seafood
- * Bakery and Confectionery
- * Online Grocery Meal-Kits
- * Other Applications

- * By Equipment Type* Tray-Sealing Machines
- * Form-Fill-Seal Systems
- * Bag-Sealing Machines
- * Vacuum Chamber Machines
- * Other Equipment Types
- * By Geography* North America* United States
- * Canada
- * Mexico
- * South America* Brazil
- * Argentina
- * Chile
- * Rest of South America
- * Europe* United Kingdom
- * Germany
- * France
- * Spain
- * Italy
- * Rest of Europe
- * Asia-Pacific* China
- * India
- * Japan
- * Australia
- * South Korea
- * Vietnam
- * Rest of Asia-Pacific
- * Middle East and Africa* Middle East* Saudi Arabia
- * United Arab Emirates
- * Turkey
- * Rest of Middle East
- * Africa* South Africa
- * Nigeria
- * Egypt
- * Rest of Africa

Frequently Asked Questions

How big is the Modified Atmosphere Packaging (MAP) Market?

The Modified Atmosphere Packaging (MAP) Market size is worth USD 20.68 billion in 2026, growing at an 8.82% CAGR and is forecast to hit USD 31.56 billion by 2031.

What is the current Modified Atmosphere Packaging (MAP) Market size?

In 2026, the Modified Atmosphere Packaging (MAP) Market size is expected to reach USD 20.68 billion.

What is modified atmosphere packaging and how does it extend shelf life?

It replaces the air inside a pack with a controlled mix—usually nitrogen or carbon dioxide—to slow microbial growth, oxidation, and moisture loss, thereby extending shelf life by several days to weeks depending on the food category.

Which gas is used most widely for meat, poultry, and seafood packs?

Carbon dioxide is favored for proteins because its antimicrobial action significantly cuts spoilage, helping this segment grow at a 9.05% CAGR through 2031.

How fast is Asia-Pacific demand for this technology expanding?

Asia-Pacific sales are rising at a 10.11% CAGR to 2031, reflecting urbanization, new cold-chain capacity, and government support for food-processing upgrades.

Are compostable films compatible with nitrogen-flush or CO₂-flush applications?

Yes; new metallized PLA and mono-material PLA/PLA films now deliver oxygen transmission rates low enough for MAP while meeting industrial-composting standards.

Which equipment category is gaining the most traction through 2031?

Vacuum-chamber machines are the fastest-growing at a 9.84% CAGR because they handle varied product shapes and achieve very low residual oxygen levels.

How do food-waste regulations influence adoption of this technology?

EU and U.S. policies targeting 50% waste reduction by 2031 recognize MAP as a validated solution, prompting retailers and exporters to require certified MAP lines in supplier contracts.