+357 96 030922
info@marketpublishers.com

Glass Additive Market Forecasts to 2030 – Global Analysis By Product (Metal Oxide, Nanoparticles, Polymers, Rare Earth Metals and Other Products), Chemical (Iron, Manganese, Sulphur, Nickel, Titanium, Chromium, Uranium and Other Chemicals), Application, End User and By Geography

https://marketpublishers.com/r/G69E43635785EN.html
Date: March 2025
Pages: 150
Price: US$ 4,150.00 (Single User License)
ID: G69E43635785EN

Abstracts

According to Stratistics MRC, the Global Glass Additive Market is accounted for $1.56 billion in 2024 and is expected to reach $2.26 billion by 2030 growing at a CAGR of 6.4% during the forecast period. Glass additives are specialty substances added to glass formulations to improve certain qualities like coloration, durability, optical clarity, and heat resistance. Metal oxides, rare earth elements, and chemical modifiers are examples of these additives that affect the physical and chemical properties of glass. For instance, boron oxide is frequently added to borosilicate glass to increase its thermal resistance, whereas iron oxide is used to make tinted or UV-blocking glass. Moreover, alumina and other additives increase mechanical strength, which increases glass's resistance to impacts and scratches.

According to the United Nations Environment Programme (UNEP), buildings account for approximately 34% of global energy demand and 37% of energy and process-related carbon dioxide (CO2) emissions.

Market Dynamics:

Driver:

Growth in infrastructure development and construction

+357 96 030922
info@marketpublishers.com

The expansion of residential, commercial, and industrial infrastructure globally is significantly driving the demand for high-performance glass. The use of glass with improved strength, thermal insulation, and durability is growing as a result of public and private sector investments in energy-efficient buildings, skyscrapers, and smart cities. Alumina, titanium dioxide, and boron oxide are examples of glass additives that enhance mechanical qualities and increase glass's resistance to mechanical impact and heat stress. Additionally, low-emissivity (Low-E) and solar control glass, which depend on particular additives to achieve desired performance, are also becoming more and more popular among architects and engineers due to the growing trend of green building certifications like LEED.

Restraint:

High manufacturing costs and capital-intensive production

The process of adding additives to glass is very capital-intensive and necessitates advanced equipment, high-temperature furnaces, and exact chemical control. Production costs are greatly increased by the cost of processing and refining raw materials such as metal oxides, rare earth elements, and specialty compounds. Operational costs are further increased by enforcing strict quality checks and maintaining controlled manufacturing conditions. Furthermore, small and medium-sized businesses (SMEs) frequently find it difficult to compete with larger manufacturers who can afford advanced production techniques and enjoy the benefits of economies of scale.

Opportunity:

Increasing demand for energy-efficient and intelligent glass

Glass additives that improve the thermal, optical, and functional qualities of glass are seeing significant growth as a result of the global movement toward energy efficiency and environmentally friendly building practices. The need for specialized additives like rare earth elements, metal oxides, and dopants that allow for dynamic control of light and heat transmission is being driven by the growing use of electro chromic, thermo chromic, and photo chromic glass in residential and commercial buildings. Additionally, areas with harsh weather conditions have a high demand for heat-reflective glass with advanced coatings and solar control glass, creating a profitable market for glass additive manufacturers.

+357 96 030922
info@marketpublishers.com

Threat:

Competition from other technologies and materials

A growing threat to the glass additive market is the use of alternative materials like polycarbonate, acrylic glass, ceramics, and advanced polymers, which provide lightweight, impact-resistant, and cost-effective solutions that, can replace traditional glass in a variety of applications. For instance, polycarbonate and acrylic are widely used in automotive windshields, electronic displays, and architectural glazing, offering similar optical clarity and strength but being more resistant to breakage; ceramic-based materials are also becoming more popular in high-temperature applications, which reduces the need for glass in industries like aerospace and defense; and the emergence of graphene-based transparent conductors and flexible displays made of plastic further challenges the demand for specialized glass additives.

Covid-19 Impact:

Due to supply chain disruptions, labor shortages, decreased industrial activity, and fluctuating raw material prices, the COVID-19 pandemic had a major effect on the glass additive market. Production and shipments of vital raw materials, including metal oxides, rare earth elements, and specialty chemicals used in glass additives, were delayed as a result of lockdowns and restrictions that caused manufacturing facilities to temporarily close. Major users of glass additives, the construction and automotive sectors, saw a decline in demand as a result of cancelled projects, lower car production, and unstable economic conditions. However, as safety and hygiene became top concerns, the pandemic also increased demand for antimicrobial and self-cleaning glass coatings, especially in consumer electronics, public infrastructure, and healthcare.

The Metal Oxide segment is expected to be the largest during the forecast period

The Metal Oxide segment is expected to account for the largest market share during the forecast period. Metal oxides are essential in sectors like consumer goods, electronics, automotive, and construction because they improve the mechanical strength, thermal resistance, optical qualities, and coloration of glass. Moreover, borosilicate glass for high-temperature applications, such as industrial equipment, cookware, and laboratory glassware, frequently contains boron oxide and aluminum oxide. The use of metal oxide additives is also being fueled by the rising demand for smart and energy-efficient glass solutions, especially in solar control and green building applications.

+357 96 030922
info@marketpublishers.com

The Titanium segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the Titanium segment is predicted to witness the highest growth rate. Titanium dioxide (TiO?) is frequently added to glass to improve qualities like durability, opacity, and UV resistance. It is widely used in sectors where better glass performance is crucial, such as electronics, automotive, and construction. The market's titanium segment has grown as a result of consumers' growing desire for long-lasting and energy-efficient glass products. Additionally, TiO? is also a crucial part of solar panels, architectural glass, and high-performance displays because it is utilized in self-cleaning and anti-reflective coatings. Its adoption is also accelerated by the growing emphasis on eco-friendly and smart glass solutions.

Region with largest share:

During the forecast period, the Europe region is expected to hold the largest market share. Europe's strong glass manufacturing industry and strict laws encouraging energy-efficient construction are responsible for this dominance. Due to their well-established end-use industries and large investments in R&D for new product innovation, nations like France, Germany, Italy, Russia, Spain, and the United Kingdom account for a sizable portion of this market share. Furthermore, the use of advanced glass additives is being propelled by the growing demand for decorative glass, smart glass, and high-performance coatings. Government incentives for low-carbon materials, circular economy projects, and the increased emphasis on sustainability all contribute to the region's market expansion.

Region with highest CAGR:

Over the forecast period, the Asia-Pacific region is anticipated to exhibit the highest CAGR. The region's expanding automotive and construction sectors are the main drivers of this quick growth, especially in nations like China and India where industrialization and urbanization are accelerating. These industries' growing need for long-lasting and energy-efficient glass products makes the use of cutting-edge glass additives necessary to improve qualities like strength, UV protection, and thermal resistance. Furthermore, the Asia-Pacific region's growing consumer goods and electronics markets support the growing use of specialty glass additives, securing the region's top spot as the world's fastest-growing market.

Key players in the market

+357 96 030922
info@marketpublishers.com

Some of the key players in Glass Additive market include BASF SE, Torrecid Group, Saint-Gobain Inc, Ardagh Group S.A., Schott AG, DuPont Inc, Ferro Corporation, Air Products and Chemicals Inc., Corning Incorporated, PPG Industries, Metall Rare Earth Limited, Bayer Material Science, Arkema Group, Covestro AG and Nippon Electric Glass Co., Ltd.

Key Developments:

In October 2024, BASF and AM Green B.V. have signed a memorandum of understanding (MoU) to jointly evaluate and develop low-carbon chemical production projects in India, utilizing renewable energy. The agreement was signed by Dr. Markus Kamieth, Chairman of the Board of Executive Directors of BASF SE, and Mahesh Kolli, Group President of AM Green, during the Asia-Pacific Conference of German Business 2024 held in New Delhi.

In August 2024, Saint-Gobain has entered a definitive agreement to acquire OVNIVER Group, a company specialising in the construction chemicals market in Mexico and Central America, for $815m in cash. This acquisition is a move to bolster Saint-Gobain’s global presence in the construction chemicals sector, following previous acquisitions of Chryso, GCP, and the ongoing FOSROC deal.

In March 2024, Ardagh Glass Packaging-North America (AGP-North America has partnered with Stevens Point Brewery to locally supply the brewery's glass beer bottles. The partnership connects Stevens Point Brewery with AGP-North America's Burlington, Wis., glass manufacturing facility, helping to keep the brewery's promise to source local products and incorporate sustainable practices into its operations.

Products Covered:

- Metal Oxide
- Nanoparticles
- Polymers
- Rare Earth Metals
- Other Products

+357 96 030922
info@marketpublishers.com

Chemicals Covered:

- Iron
- Manganese
- Sulphur
- Nickel
- Titanium
- Chromium
- Uranium
- Other Chemicals

Applications Covered:

- Glass Transition
- Silicate Glass Manufacturing
- Aerodynamic Levitation
- Network Glasses
- 3D Printing
- Color Strengthening
- Other Applications

End Users Covered:

+357 96 030922
info@marketpublishers.com

- Building & Construction
- Packaging
- Automotive & Transportation
- Electronics & Appliances
- Other End Users

Regions Covered:

- North America
  - US
  - Canada
  - Mexico
- Europe
  - Germany
  - UK
  - Italy
  - France
  - Spain
  - Rest of Europe
- Asia Pacific
  - Japan

+357 96 030922
info@marketpublishers.com

- China
- India
- Australia
- New Zealand
- South Korea
- Rest of Asia Pacific

South America

- Argentina
- Brazil
- Chile
- Rest of South America

Middle East & Africa

- Saudi Arabia
- UAE
- Qatar
- South Africa
- Rest of Middle East & Africa

What our report offers:
- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2022, 2023, 2024, 2026, and 2030

+357 96 030922
info@marketpublishers.com

- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

5 GLOBAL GLASS ADDITIVE MARKET, BY PRODUCT

5.1 Introduction
5.2 Metal Oxide
5.3 Nanoparticles
5.4 Polymers
5.5 Rare Earth Metals
5.6 Other Products

6 GLOBAL GLASS ADDITIVE MARKET, BY CHEMICAL

6.1 Introduction
6.2 Iron
6.3 Manganese
6.4 Sulphur
6.5 Nickel
6.6 Titanium
6.7 Chromium
6.8 Uranium
6.9 Other Chemicals

7 GLOBAL GLASS ADDITIVE MARKET, BY APPLICATION

7.1 Introduction
7.2 Glass Transition
7.3 Silicate Glass Manufacturing
7.4 Aerodynamic Levitation
7.5 Network Glasses
7.6 3D Printing
7.7 Color Strengthening
7.8 Other Applications

8 GLOBAL GLASS ADDITIVE MARKET, BY END USER

8.1 Introduction
8.2 Building & Construction
8.3 Packaging
8.4 Automotive & Transportation

+357 96 030922
info@marketpublishers.com

9 GLOBAL GLASS ADDITIVE MARKET, BY GEOGRAPHY

10 KEY DEVELOPMENTS

+357 96 030922
info@marketpublishers.com

11 COMPANY PROFILING

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Glass Additive Market Forecasts to 2030 – Global Analysis By Product (Metal Oxide, Nanoparticles, Polymers, Rare Earth Metals and Other Products), Chemical (Iron, Manganese, Sulphur, Nickel, Titanium, Chromium, Uranium and Other Chemicals), Application, End User and By Geography

Product link: https://marketpublishers.com/r/G69E43635785EN.html

Price: US$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G69E43635785EN.html