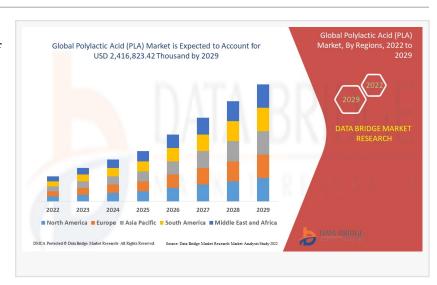


# Global Polylactic Acid (PLA) Market is Growing at a CAGR of 11.6% in the Forecast by 2029

Data Bridge Market Research analyses that the market is growing with a CAGR of 11.6% and is expected to reach USD 2,416,823.42 thousand by 2029

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December 13, 2022 /
EINPresswire.com/ -- The global
polylactic acid (PLA) market is expected
to grow significantly in the forecast
period of 2022 to 2029. Data Bridge
Market Research analyses that the
market is growing with a CAGR of



11.6% in the forecast period of 2022 to 2029 and is expected to reach USD 2,416,823.42 thousand by 2029.

Polylactic Acid (PLA) Market research report execution is becoming very vital for the businesses to gain success because it offers many benefits including insights into revenue growth and sustainability initiative. The large scale Polylactic Acid (PLA) Market research report is an absolute overview of the market that takes into account various aspects of product definition, market segmentation based on various parameters, and the established merchant landscape. This industry report also offers businesses with the company profile, product specifications, production value, manufacturer's contact information and market shares for company. Moreover, Polylactic Acid (PLA) Market business report blends together all-inclusive industry analysis with particular estimates and forecasts to provide complete research solutions with greatest clarity for strategic decision making.

Polylactic acid (PLA) is a type of renewable plastic primarily derived from renewable materials like corn starch and sugarcane. Polylactic acid (PLA) possesses several beneficial mechanical properties over other biodegradable polymers. Polylactic acid (PLA) is a thermoplastic aliphatic polymer, and this bioplastic is produced from the crystallization of lactic acid. Having a chemical formula (C3H4O2) n, the polylactic acid (PLA) is a semi-crystalline and biodegradable hydrophobic polymer. Polylactic acid (PLA) can be broken down into a range of biodegradable components, which makes it ideal for application by a wide range of applications.

Get a PDF Sample of the Polylactic Acid (PLA) Market @ <a href="https://www.databridgemarketresearch.com/request-a-sample/?dbmr=global-polylactic-acid-pla-market">https://www.databridgemarketresearch.com/request-a-sample/?dbmr=global-polylactic-acid-pla-market</a>

#### Market Definition

Increasing demand for biodegradable packaging alternatives from the packaging industry is an important driver for the global polylactic acid (PLA) market. PLA can be an alternative to petroleum-based polymers, and the growing demand for bio-based plastics film in agriculture is expected to boost the growth of the global polylactic acid (PLA) market. The multi-functionalities of PLA and growing consumer inclination towards eco-friendly plastic products are accepted to bring opportunity to the global polylactic acid (PLA) market. However, poor performance issues compared to conventional plastic challenge global polylactic acid (PLA) market growth.

Competitive Landscape and Global Polylactic Acid (PLA) Market Share Analysis

Global polylactic acid (PLA) market competitive landscape provides details of competitors. Details included are company overview, company financials, revenue generated, market potential, investment in research and development, new market initiatives, production sites and facilities, company strengths and weaknesses, product launch, product trials pipelines, product approvals, patents, product width and breadth, application dominance, technology lifeline curve. The above data points provided are only related to the companies' focus related to the Global Polylactic acid (PLA) market.

Some of the prominent participants operating in the Global Polylactic acid (PLA) market are BASF SE

**Futerro** 

NatureWorks LLC

**TotalEnergies Corbion** 

Sulzer Ltd

Mitsubishi Chemical Corporation

TORAY INDUSTRIES, INC.

Merck KGaA

Musashino Chemical Laboratory Ltd.,

**Evonik Industries AG** 

Polyvel Inc.

UNITIKA LTD.

Jiangxi Academy of Sciences Biological New Materials Co., Ltd.

Shanghai Tong-jie-liang Biomaterials Co., Ltd.

Zhejiang Hisun Biomaterials Co., Ltd.

Radici Partecipazioni SpA.

# Global Polylactic Acid (PLA) Market Dynamics Drivers

Increasing demand for biodegradable packaging alternatives from the packaging industry. The pandemic has led to a positive impact on the growth of the packaging industry. It has resulted in high demand for plastic packaging, including eco-friendly substitutes of plastics such as packaging materials made from PLA. Food manufacturers, who initially opted for other types of packaging, had initiated using PLA-based packaging, as products are economical, safe, and enduring. Additionally, due to the increase in sustainability in the packaging industry for maintaining product quality, biopolymer packaging materials such as PLA-based materials are increasing as PLA decomposes into water and carbon dioxide in approximately 47 to 90 days. Four times faster than PET-based bags used in various packaging. Moreover, their low cost, renewable raw materials, and agro-industrial waste usage drive their demand, as polylactic acid is obtained from renewable sources.

#### PLA can be an alternative to petroleum-based polymers

Apart from this, polylactic acid is used in manufacturing various components used in the automotive sector. Polylactic acids are used in applications such as the interior parts and hood under components. These products are known for reducing their carbon footprint owing to their high bio content. PLA offers numerous properties such as UV resistance, impact resistance, high gloss, dimensional stability, and coloring ability. These factors make it an alternative to most traditional plastics made up of petroleum products and raw materials such as polyethylene terephthalate, polycarbonate, polybutylene terephthalate, and acrylonitrile butadiene styrene, and polyamide, which are preferred for automotive engine compartments and interiors and other uses as well.

### Growing demand for bio-based plastics film in agriculture

With growing awareness regarding disposal problems of non-degradable films, applications of polylactic acid-based mulch films are expected to increase in agriculture. Mulch films are extensively used in the cultivation of fruits & vegetables. The mechanical properties of PLA are comparable to the existing mulch film products and have the advantage of being completely biodegradable through a single growing season. This will positively impact the market growth and act as a global polylactic acid (PLA) market driver.

Imposition of strict regulations on environmental safety by various governments

Due to environmental concerns and fast climate-changing factors, regulatory authorities, such as

EPA, FDA, and many others, are increasingly opting for biodegradable plastics such as polylactic

acid (PLA) and focusing on increasing consumer awareness regarding the need for the use of

biodegradable products.

# Opportunities

Multi-functionalities of PLA

Multi-functionalities and extensive use of PLA in different industries and applications will provide lucrative opportunities for growth in the global polylactic acid (PLA) market. Bas Polylactic acid is

biodegradable and industrially compostable. Among the first renewable polymers, we can compete with the existing polymers, combining their functional characteristics, such as transparency, gloss, and stiffness. Polylactic acid is currently used in many industries and applications, including packaging, single-use tableware, textiles, oil & gas, electronics, automotive, and 3D printing. Due to the various and versatile uses of polylactic acid across multiple industries and the multi-functionalities of polylactic acids, the market is projected to witness significant growth opportunities in the near future.

#### Growing consumer inclination towards eco-friendly plastic product

Furthermore, the richness of biomass, research-driven resources, strong downstream industry demand, material supply, and supporting government policy has created significant bioplastic business opportunities in these regions. The growth has also been supported by improving consumer awareness regarding sustainable plastic solutions and increasing efforts to eliminate the use of non-biodegradable conventional plastics PLA. Traditionally used petroleum-based plastics take decades to break down or degrade and lay in landfills for a long period. PLA breaks down faster when they are discarded and absorbed back into the natural system. In addition, the decomposition rate of biodegradable plastics such as PLA by the activities of microorganisms is much faster than that of traditional plastics.

#### Restraints/Challenges

Concerns over cost and specific industrial composting system

The usage of polylactic acids in small and medium enterprises has been challenging due to the lack of resources or the technology and facilities required for extracting and fermentation high-quality lactic acid and polylactic acid. Moreover, the selection of the right composition of polylactic acid is a key aspect that many companies have not figured out accurately. This increases the production cost of polylactic acid due to a lack of appropriate technology and techniques. The selection of the right composition of lactic acid for the production of polylactic acid is a complex method that requires validation at a laboratory and factory-scale level.

# Unpredictable raw material prices

The production costs of polylactic acid and related products are witnessing a significant increase due to the higher costs of raw materials along with transportation, energy consumed, and chemicals, which leads to a reduction in margins for manufacturers, distributors, and suppliers. Thus, resulting in high end-user application prices.

# Poor performance issues as compared to conventional plastic

Low barrier properties to air, water, and oxygen and low resistance to heat are some of the major performance issues related to PLA compared to conventional plastics. This restricts its penetration in various industries, including electronics and automotive. In addition, poor mechanical properties such as low impact & tensile strength and process capabilities restrict the penetration of PLA in various applications. These performance limitations of PLA are a major challenge for the market's growth. In addition, PLA is a bio-based and biodegradable polymer built from lactic acid molecules. Being a thermoplastic polyester, it softens when heated and

hardens when cooled.

Browse More about This Premium Research Report @ <a href="https://www.databridgemarketresearch.com/reports/global-polylactic-acid-pla-market">https://www.databridgemarketresearch.com/reports/global-polylactic-acid-pla-market</a>

Global Polylactic acid (PLA) Market Scope

Global polylactic acid (PLA) market is categorized based on type, raw material, form, application, and end user. The growth amongst these segments will help you analyze major growth segments in the industries and provide the users with a valuable market overview and market insights to make strategic decisions to identify core market applications.

Type

Racemic PLLA (Poly-I-lactic acid)

PDLA (Poly-d-lactic acid)

Regular PLLA (Poly-I-lactic acid)

PDLLA (Poly-dl-lactic acid)

**PLA Blends** 

Based on type, the global polylactic acid (PLA) market is classified into five segments, namely Racemic PLLA (Poly-I-lactic acid), PDLA (Poly-d-lactic acid), Regular PLLA (Poly-I-lactic acid), PDLLA (Poly-d-lactic acid), and PLA Blends.

Raw Material

Sugarcane

Corn

Cassava

Sugar Beet

Others

Based on raw material, the global polylactic acid (PLA) market is classified into sugarcane, corn, cassava, sugar beet, and others.

Form

Films and Sheets

Coatings

Fiber

Others

Based on the form, the global polylactic acid (PLA) market is classified into films and sheets, coatings, fiber, and others.

**Application** 

**Packaging** 

Transport

Agriculture

Medical

Electronics Textile Hygiene Others

Based on application, the global polylactic acid (PLA) market is segmented into packaging, transport, agriculture, medical, electronics, textile, hygiene, and others.

**End User** 

Plastic Films

**Bottles** 

**Biodegradable Medical Devices** 

Based on the end user, the global polylactic acid (PLA) market is classified into plastic films, bottles, and biodegradable medical devices.

Global Polylactic Acid (PLA) Market Regional Analysis/Insights

The global polylactic acid (PLA) market is segmented on the basis of type, raw material, form, application, and end user.

The countries in the global polylactic acid (PLA) market are the U.S., Canada, Mexico, U.K., Russia, France, Spain, Italy, Germany, Turkey, Netherlands, Switzerland, Belgium, Rest of Europe, Japan, China, South Korea, India, Singapore, Thailand, Indonesia, Malaysia, Philippines, Australia, and the Rest of Asia-Pacific, Brazil, Argentina, Rest of South America, Egypt, Saudi Arabia, United Arab Emirates, South Africa, Israel and Rest of the Middle East and Africa.

Asia-Pacific dominates the global polylactic acid (PLA) market with a CAGR of around 12.1%. The U.S dominates in the North American region owing to the growing demand for bio-based polymer medical devices in the region. Germany dominated expected to dominate the Europe polylactic acid (PLA) market because of the increasing consumer preference for PLA film packaging solutions in the region. Saudi Arabia dominated the polylactic acid (PLA) market in the Middle East & Africa, increasing different packaging solutions in the region.

Key questions answered in the report:

What will the market development pace of Polylactic Acid (PLA) market?

What are the key factors driving the Global Polylactic Acid (PLA) market?

Who are the key manufacturers in market space?

What are the market openings, market hazard and market outline of the market?

What are sales, revenue, and price analysis of top manufacturers of Polylactic Acid (PLA) market?

Who are the distributors, traders, and dealers of Polylactic Acid (PLA) market?

What are the Polylactic Acid (PLA) market opportunities and threats faced by the vendors in the Global Polylactic Acid (PLA) industries?

What are deals, income, and value examination by types and utilizations of the market?

What are deals, income, and value examination by areas of enterprises?

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