

## 3D Printing PLA Market by Application (Consumer Products, Automotive Parts, Industrial Applications, Healthcare, Aerospace and Defense, Others) And Geography – Global Forecast To 2027

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### **Abstracts**

3D Printing PLA Market by Application (Consumer Products, Automotive parts, Industrial Applications, Healthcare, Aerospace & Defense, Others) And Geography – Global Forecast To 2027

The 3D printing PLA market is expected to grow at a CAGR of 19.8% from 2020 to 2027 to reach \$818.0 million by 2027.

Succeeding an extensive secondary and primary research and in-depth analysis of the market scenario, the report carries out an impact analysis of the key industry drivers, restraints, and opportunities. Factors such as the rising demand for bioplastics, favorable government initiatives, and the performance benefits of PLA are driving the 3D printing PLA market are driving the growth of this market. Moreover, the rising adoption of PLA in the healthcare sector provides significant growth opportunities for players operating in the market.

However, the high cost of PLA and the lack of awareness and technical knowledge regarding 3D printing hinder the growth of this market. The major trends supporting the growth of the market include increasing number of large chemical companies that have started developing their 3D printing materials, increasing focus on environmental conservation, rising adoption in institutional engineering departments to create visual models of components for training and education purposes, and high consistency of material and ease of use with a wide variety of colors.



Based on application, the 3D printing PLA market is segmented into consumer products (electronic components, jewelry, artistic items, and other products), automotive parts, industrial applications (equipment & machines and goods & materials), healthcare, aerospace & defense (prototype weapons and body & spare parts), and other applications.

The healthcare segment is expected to grow at the highest CAGR during the forecast period. The high growth of the segment is majorly attributed to the rising adoption of 3D printing in medical and dental sub-industries, allowing medical professionals to provide patients with new forms of treatment, thereby driving the demand for PLA filaments used for the development of new surgical cutting and drill guides, prosthetics, and the creation of patient-specific replicas of bones, organs, and blood vessels. Moreover, it allows for custom parts tailored to each individual, improving the user experience.

Based on the type of consumer products, the 3D printing PLA market is segmented into electronic components, jewelry, artistic items, and other products. The electronic components segment is projected to grow with the fastest CAGR during the forecast period. The high growth in this segment is majorly attributed to the rising demand for sustainable and eco-friendly electronic components and increased agility in the development & manufacture of electronics products. Moreover, the use of 3D printing technology in consumer electronics applications helps in the in-house development and prototyping of PCBs, allowing designers to create fully-functional electronic devices and prepare for full-scale manufacturing.

Based on industrial application, the 3D printing PLA market is segmented into equipment & machines and goods & materials. The equipment & machines segment is projected to grow at the highest CAGR during the forecast period. The high growth of this segment is majorly attributed to the agility and flexibility offered by 3D printing technology for prototyping and producing equipment & machines used for industrial applications. Moreover, technology offers agile tooling, reduces the lead times required in manufacturing processes, and boosts operational productivity, which drives the demand for 3D printing PLA in industrial equipment & machine applications.

An in-depth analysis of the geographical scenario of the 3D printing PLA market provides detailed qualitative and quantitative insights about the six major geographies (North America, Europe, Asia-Pacific, Latin America, the Middle East, and Africa) along with the coverage of major countries in each region.

In 2020, North America is projected to command the largest share of the 3D printing



PLA market, followed by Asia-Pacific, Europe, Latin America, and the Middle East & Africa. The large share of this region is mainly attributed to the early adoption of this technology, the presence of key players, well-established infrastructure, increasing acceptance of 3D printing PLA across various industries, high demand for 3D printing in aerospace & defense applications, and significant opportunities for PLA filament for prototyping and manufacturing weapons and spare parts.

However, the Asia-Pacific region is projected to grow at the fastest CAGR during the forecast period. The high growth of this region is attributed to the robust industrial base, increased funding for research & development, and the introduction of many government-led strategies & policies, such as digitalization and Industry 4.0. Moreover, the increasing adoption of digitalization strategies across the developing nations, the booming consumer products market, and the growing adoption of 3D printing in the healthcare, construction, and education sectors provide significant growth opportunities for 3D printing PLA in the Asia-Pacific region.

The key players operating in the 3D printing PLA market are Stratasys Ltd. (Israel), Colorfabb B.V. (Netherlands), Ultimaker B.V. (Netherlands), Polymaker (China), Torwell Technologies Co. Ltd. (China), Matterhacker Inc. (U.S.), Evonik Industries AG (Germany), BASF SE (Netherlands), Zortrax (Poland), Fillamentum (Czech Republic), Sculpteo (France), Formfutura (Netherlands), IC3D Inc. (U.S.), Protoplant Inc. (U.S.), and Amolen (China).

#### SCOPE

3D Printing PLA Market, by Application

**Consumer Products** 

**Electronic Components** 

Jewelry, Artistic Items, and Other Products

Automotive Parts

Industrial Applications

Equipment & Machines



#### Goods & Materials

Healthcare

Aerospace & Defense

Prototype Weapons

Body & Spare Parts

**Other Applications** 

#### 3D Printing PLA Market, by Geography

North America

U.S.

Canada

#### Europe

Germany

U.K.

France

Italy

Spain

Russia

Rest of Europe

Asia-Pacific (APAC)



Japan

China

South Korea

India

Rest of Asia-Pacific (RoAPAC)

Latin America

Middle East and Africa



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