Global Polyhydroxybutyrate (PHB) Market Information- By Application (Medical Devices, Packaging, Mulch Films, and others), By End Use Industry (Pharmaceutical, Food, Agriculture, Automotive and others) and By Region- Forecast Till 2023

Polyhydroxybutyrate (PHB) is a biopolymer produced from microorganisms. It is a kind of polyhydroxylalkanoate (PHA) and is produced via fermentation process. They are thermoplastic polymer with properties very similar to petroleum based polypropylene (PP). They are biodegradable and are widely used in the manufacturing of packaging material, mulch films, and medical devices. PHB is attracting heavy interest from end use industries such as agriculture, food, and pharmaceutical due to its environmental friendly characteristics.

Increasing number of initiatives by government and environmental agencies coupled with rising consumer awareness regarding the harmful effects of the non-biodegradable packaging along with ecofriendly nature of the product is driving PHB market growth. However, higher price of PHB based polymer in comparison to conventional polymers is slated to hinder PHB market growth over the forecast period.

PHB is widely used in the packaging of food and cosmetic products as well. Increasing consumption of packaged food due to busy lifestyle and easy availability is set to compliment the market growth over the forecast period. The growing population has resulted in the shrinking of agricultural land due to industrialization and urbanization and has forced farmers to increase productivity in the relatively smaller areas. This has increased the demand for PHB as mulch films.

Global Polyhydroxybutyrate Market Share by End Use Industry (2016), (%)

The increasing usage of polyhydroxybutyrate (PHB) in packaging material such as bin bags, cling films, and garbage bags is also expected to fuel market growth over the forecast period. The growth in consumption of packaged food has propelled the usage of PHB in food processing industry.
Regional Analysis

On the basis of region, global polyhydroxybutyrate market segmentation includes its current and estimated demand in Asia Pacific, Europe, Latin America, North America, and Middle East & Africa. Asia Pacific is projected to grow at the highest rate over the forecast period due to increasing demand from end use industries such as pharmaceutical, food, agriculture, and automotive. Among these, the demand for biodegradable plastic is predicted to increase in developing countries such as India, China, and Japan owing to increasing food and pharmaceutical industries in these countries.

Europe has emerged as the largest regional market for biodegradable packaging and paper industry over the last few years. In this region, countries such as Germany, Italy, UK, and Sweden have emerged as leading consumer markets and are expected to witness above average growth over the next few years. North America is expected to witness a steady growth in the usage of biodegradable plastic and paper over the forecast period. U.S is predicted to be the largest PHB market in this region followed by Mexico and Canada. Latin America region is also predicted to witness a positive growth in the use of PHB over the forecast period.

The Middle East & Africa is estimated to witness moderate growth over the forecast period. Increasing technological advancement coupled with implementation of cultivation techniques to enhance crop production is expected to raise product demand in countries including South Africa.

Segmentation

The global polyhydroxybutyrate market is segmented on the basis of application, end use industry and region. Based on the application, market is segmented into medical devices, packaging, mulch films, and others. Based on the end use industry, the market is categorized into pharmaceutical, food, agriculture, automotive and others. Based on region, this market is segmented into Asia Pacific, Europe, Latin America, North America, and Middle East & Africa.

Key Players

The prominent players operating in the polyhydroxybutyrate market include BASF SE (Germany), Biomer (Germany), TianAn Biologic Materials Co., Ltd. (China), PHB Industrial S.A (Brazil), BIO-ON (Italy), Telles, LLC (U.S), TEPHA INC (U.S) and others.

Geographical Analysis

The report covers brief analysis of geographical regions such as North America, Europe, Asia Pacific, Latin America and Middle East & Africa.

Intended Audience

- Polyhydroxybutyrate manufacturers
- Traders and distributors of polyhydroxybutyrate
- Production process industries
- Potential investors
- Raw material suppliers
- Nationalized laboratory
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