

## **Thermoplastic Starch (TPS) - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019-2029**

Market Report | 2024-02-17 | 120 pages | Mordor Intelligence

### **AVAILABLE LICENSES:**

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

### **Report description:**

The Thermoplastic Starch Market size is estimated at 219.20 kilotons in 2024, and is expected to reach 333.92 kilotons by 2029, growing at a CAGR of 8.79% during the forecast period (2024-2029).

The COVID-19 pandemic had a negative impact on the market in 2020. During that time, manufacturing activities were temporarily halted, reducing the usage of thermoplastic starch as a component and thereby impacting the market. However, with the ease of the restrictions, the market started to gather pace over the past couple of years.

#### Key Highlights

- The increasing demand from the packaging industry and favorable government policies regarding the increased usage of bio-plastics are likely to fuel the market expansion.
- On the contrary, multiple technical constraints associated with TPS will likely hinder the market's growth.
- The technological advancements and innovation to enhance the properties of thermoplastic starch is likely to act as an opportunity in the forecast period for the market studied.
- Europe is the leading region in the global thermoplastic starch market, whereas Asia-Pacific is the fastest-growing region in the market studied.

#### Thermoplastic Starch (TPS) Market Trends

##### Increasing Demand from the Packaging Films

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scott-international.com](mailto:support@scott-international.com)

[www.scott-international.com](http://www.scott-international.com)

- The use of thermoplastic starch films displays a lucid use of natural resources, thereby reducing environmental pollution. Thermoplastic starch films present many advantages, such as biodegradability, low cost, ease of processing, and renewability. The starch films are being used as a promising kind of commercial preservation film for extending the shelf of food.
- Thermoplastic starch (TPS) is a starch derivative and is widely accepted as the most suitable material that can be used in place of synthetic polymers in the packaging industry.
- The application of hydrolyzed corn starch films as a sustainable packaging material grants several advantages, such as biodegradability, reusability, and reduced environmental impact compared to traditional petroleum-based plastics.
- Many companies are shifting towards sustainable packaging materials. For instance, Ingredion, a United States-based global ingredients solutions company, offers CRISP FILM, a high amylose, white to off-white colored corn starch. The products offer good film-forming characteristics and act as a protective barrier when used as a coating for fried foods.
- According to the United States Department of Agriculture, USDA, scientists from the Agricultural Research Service (ARS) developed starch-based film, or coating, with the ability to make paper and other materials more water-resistant and biodegradable. The film product is widely used in food packaging, plastic bags, and other products, reducing the amount of synthetic products clogging landfills.
- In August 2022, LaFabrica Craft Pvt Ltd, an India-based company involved in the production of eco-friendly products for common plastic packaging items, developed a fully biodegradable shampoo sachets and chutney packets using a natural biopolymer. The sachet material has been derived from organic substances such as corn, tapioca starch, seaweed, and casein. Also in August 2022, Great Wrap, an Australian-based biomaterials company, announced the creation of a compostable bioplastic alternative to clingfilm made from waste potatoes.
- Therefore, all these factors are expected to impact the demand for the market studied during the forecast period.

#### The Asia-Pacific Region is the Fastest Growing Region

- In Asia-Pacific, the demand for packaged food is growing, owing to lifestyle changes, the growing disposable income, the increasing number of working professionals, and the growing preference for fast food. Consumers prefer ready-to-consume foods because they have considerably less time to cook. In addition, ready-to-consume foods are fresh and have attractive and sturdy packaging, supporting the demand for the market studied.
- China is the world's largest consumer of packaging materials globally owing to factors such as growing per capita income and rising e-commerce giants. According to Interpak, in China, total packaging in the foodstuff packaging category is expected to reach 447 billion units in 2023, indicating an increased demand for thermoplastic starch from the packaging industry.
- In India, food processing is the largest consumer of packaging at 45%, followed by pharmaceuticals and personal care products. Increasing demand from these end-user segments is creating a massive potential for expansion. The food and beverages industry accounts for about 3% of India's GDP and is the single largest employer in the country, with more than 7.3 million workforces. All such factors showcase a promising outlook for the market studied.
- In Japan, every person in the country uses around 300-400 plastic bags annually, or more than 40 billion for the entire nation. Thus, the increasing regulations on traditional plastic bags in the country are expected to propel the demand for TPS-based products during the forecast period.
- As the increasing number of Japanese consumers allocate a higher budget percentage for food, various opportunities await investors and international brands to enter the packaging market and introduce new food packaging preferences for local consumption. Thus, the TPS market holds future opportunities in the Japanese packaging market.
- The Chinese 3D printing industry is one of the world's most dynamic and rapidly growing. It is the second-largest market in the world, after the United States. There are about 310 3D printing startups in China, including HeyGears, focusing on designing and developing intelligent wearable equipment; Shanghai Smartee Denti-Technology Co. Ltd uses 3D printing technology for designing and producing orthodontics. The company developed invisible 3D printed braces based on its proprietary "Invisible treatment

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

technology" as a replacement for traditional wire braces.

- There are a few 3D printing centers in India right now, but several healthcare and medical tech companies have entered this segment. The cost will also be reduced if there are more manufacturers. The per capita price also decreases if there is widespread use and demand for treatment; moreover, it costs less. This results in an impact on the market studied.
- Japan has an aging population, which is driving demand for customized medical devices and implants. 3D printing technology can be used to produce these devices quickly and at a low cost. Moreover, Japan has a vibrant creative industry, and 3D printing technology can produce customized and unique products for the fashion, art, and design sectors.
- Therefore, the demand for thermoplastic starch from various end-user industries is expected to increase during the forecast period in Asia-Pacific.

## Thermoplastic Starch (TPS) Industry Overview

The thermoplastic starch (TPS) market is consolidated, with a few major players dominating a significant portion. Some major companies (not in any particular order) include Novamont SPA, BIOTEC, Kuraray Co. Ltd (Plantic), and AGRANA Beteiligungs AG, and Grupa Azoty among others.

### Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

### Table of Contents:

#### 1 INTRODUCTION

- 1.1 Study Assumptions
- 1.2 Scope of the Study

#### 2 RESEARCH METHODOLOGY

#### 3 EXECUTIVE SUMMARY

#### 4 MARKET DYNAMICS

##### 4.1 Drivers

- 4.1.1 Increasing Demand from the Packaging Industry
- 4.1.2 Favorable Government Policies Promoting Bio-plastics

##### 4.2 Restraints

- 4.2.1 Multiple Technical Constrains Associated With TPS

##### 4.3 Industry Value Chain Analysis

##### 4.4 Porter's Five Forces Analysis

- 4.4.1 Bargaining Power of Suppliers
- 4.4.2 Bargaining Power of Consumers
- 4.4.3 Threat of New Entrants
- 4.4.4 Threat of Substitute Products and Services
- 4.4.5 Degree of Competition

#### 5 MARKET SEGMENTATION (Market Size in Volume)

##### 5.1 Manufacturing Type

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

5.1.1 Extrusion Molding

5.1.2 Injection Molding

5.2 Application

5.2.1 Bags

5.2.2 Films

5.2.3 3D Print

5.2.4 Other Applications (Disposable Tableware (cutlery) and Others)

5.3 Geography

5.3.1 Asia-Pacific

5.3.1.1 China

5.3.1.2 India

5.3.1.3 Japan

5.3.1.4 South Korea

5.3.1.5 ASEAN Countries

5.3.1.6 Rest of Asia-Pacific

5.3.2 North America

5.3.2.1 United States

5.3.2.2 Canada

5.3.2.3 Mexico

5.3.3 Europe

5.3.3.1 Germany

5.3.3.2 United Kingdom

5.3.3.3 Italy

5.3.3.4 France

5.3.3.5 NORDIC Countries

5.3.3.6 Rest of Europe

5.3.4 Rest of the World

5.3.4.1 South America

5.3.4.2 Middle East & Africa

6 COMPETITIVE LANDSCAPE

6.1 Mergers, Acquisitions, Joint Ventures, Collaborations, and Agreements

6.2 Market Share (%)\*\*/Ranking Analysis

6.3 Strategies Adopted by Leading Players

6.4 Company Profiles

6.4.1 Agrana Beteiligungs-AG

6.4.2 Biome Bioplastics Limited

6.4.3 Biotec Biologische Naturverpackungen GmbH & Co. KG

6.4.4 Biologiq Inc.

6.4.5 Cardia Bioplastics

6.4.6 Great Wrap

6.4.7 Grupa Azoty

6.4.8 Kuraray Co. Ltd (PLANTIC)

6.4.9 Novamont SPA

6.4.10 Rodenburg Biopolymers

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

## 7 MARKET OPPORTUNITIES AND FUTURE TRENDS

### 7.1 Technological Advancements and Innovation to Enhance the Properties of Thermoplastic Starch

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

**Thermoplastic Starch (TPS) - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019-2029**

Market Report | 2024-02-17 | 120 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

**ORDER FORM:**

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-22"/>
		Signature	

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

