



**CCM** Data & Business  
Intelligence

# **Production of Functional Oligosaccharides in China 2014–2016**

**The First Edition  
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## **1. Introduction**

This report presents the development of functional oligosaccharides in China from 2014 to 2016, together with the production situation of isomalto-oligosaccharide (IMO), fructo-oligosaccharide (FOS), soybean oligosaccharide (SBOS), galacto-oligosaccharide (GOS), xylo-oligosaccharide (XOS) and trehalose, which are main species across the functional oligosaccharide market. It attaches importance to the following parts:

- Annual review of hot spots in China's functional oligosaccharides industry in 2016
- Capacity and output in China, 2014–2016
- Major producers and distribution in China, 2014–2016
- Monthly ex-works price, 2014–2016

## **2. Methodology and source**

The report is based on data sourced by diverse methods, which are listed as follows:

### **Desk research**

Desk research includes access to published magazines, journals, government statistics, industry statistics, customs statistics, association seminars as well as information on the Internet. Much work has gone into the compilation and analysis of the information obtained. When necessary, information has been checked and discussed internally related to market structure and performance characteristics, such as key producers, key end users, production levels, demand from end users.

### **Telephone interview**

CCM has conducted extensive telephone interviews with major participants in the industry in order to research the functional oligosaccharides market in China.

The interviewees include the following groups:

- Key producers
- Key end users
- Key traders
- Raw material suppliers
- Associations involved
- Industry experts

### **Network search**

CCM employs network to contact industry participants by using B2B websites and software.

### **Data processing and presentation**

The data collected and compiled was variously sourced from:

- CCM's database
- Published articles from periodicals, magazines, journals and third-party databases
- Statistics from governments and international institutes
- Telephone interviews with domestic producers, joint ventures, service suppliers and government agencies
- Third-party data providers
- Customs statistics
- Comments from industrial experts
- Professional databases
- Information from the Internet

The data has been combined and cross-checked to ensure that this report is as accurate and

methodologically sound as possible. Throughout the process, a series of discussions were held within CCM to systematically analyse the data and draw appropriate conclusions.

### **3. Executive summary**

With wider application scope and higher market recognition of functional oligosaccharides, this industry in China still kept going from 2014 to 2016 on the whole, whose application was further expanded in food, beverage and medicine fields. At the same time, the functional oligosaccharide industry was also suffered from overcapacity, mainly due to the gap between rapid capacity increase and small demand. Also, the production of functional oligosaccharides had been affected because of restriction by environmental policies, such as some manufacturers can't afford high cost and have to suspend its production.

There are several categories of functional oligosaccharides which are in production and used across domestic market, mainly including isomalto-oligosaccharide (IMO), fructo-oligosaccharide (FOS), soybean oligosaccharide (SBOS), galacto-oligosaccharide (GOS), xylo-oligosaccharide (XOS) and trehalose. Among these products, IMO developed the earliest, the most widely used, and even has the lowest cost. What's more, IMO witnessed the highest capacity of XXX t/a from 2014 to 2016.

From the growth of product output, XOS is increasingly recognised by the public as a functional condiment, with a higher growth rate. The output of XOS grew rapidly from 2014 to 2016 with a CAGR of XXX. There were only seven active XOS producers in China, which were mainly located in Henan Province, Shandong Province, Sichuan Province and Jiangsu Province.

At the same time, some products were not developed smoothly. Take trehalose as an example, the capacity of trehalose grew year by year from 2014 to 2016, reaching XXX t/a in 2016. However, downstream demand for trehalose was sluggish in 2015 and 2016. Additionally, trehalose kept an operating rate as low as XXX in 2016, and there were only XXX major manufacturers in China in 2016.

With the expansion of product application scope, the prospect of functional oligosaccharides is inspiring and the application scope will continue to expand. For example, two producers had been issued license for producing GOS as food additive in China in 2016, expanding the application into dietary fiber. The demand and market share for functional oligosaccharides will continue to see a positive growth.

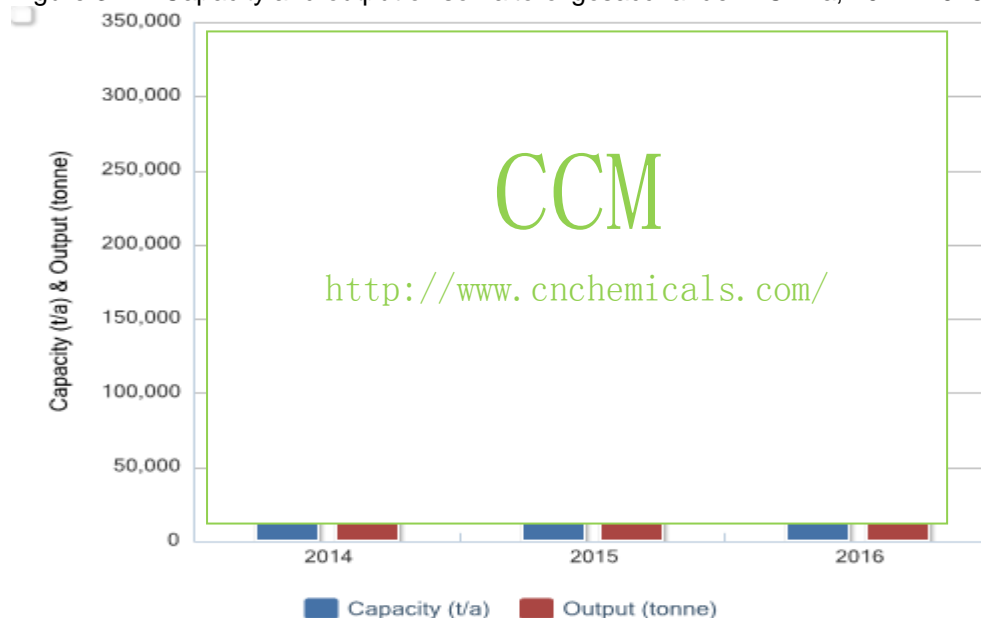
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#### 3.1 Capacity and output in China, 2014–2016

Figure 3.1-1 Capacity and output of isomalto-oligosaccharide in China, 2014–2016



Source: CCM

#### 4.2 Major producers and distribution in China, 2014–2016

Table 4.2-1 Production of major producers of fructo-oligosaccharide in China, 2014–2016

No.	Producer	Abbreviation	Location	Status	Capacity, t/a			Output, tonne		
					2016	2015	2014	2016	2015	2014
1	...	Xiandai Tianfeng	...	Active	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...
<b>Total</b>					...	...	...	...	...	...

Source: CCM

...

## 6.2 Major producers and distribution in China, 2014–2016

Figure 6.2-1 Share of galacto-oligosaccharide capacity in China by region, 2016



Source: CCM

## 7.2 Major producers and distribution in China, 2014–2016

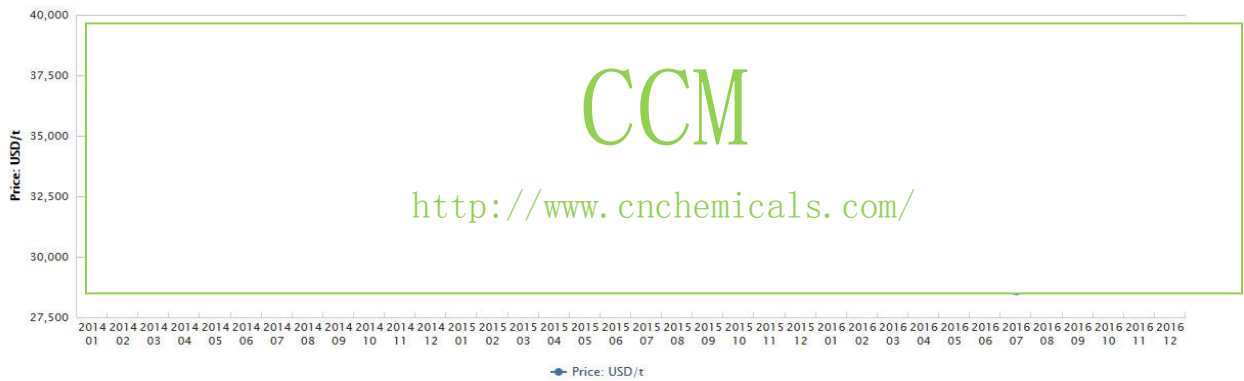
Figure 7.2-1 Distribution of the top five xylo-oligosaccharide producers in China by capacity, 2016



Source: CCM

### 7.3 Monthly ex-works price in China, 2014–2016

Figure 7.3-1 Monthly ex-works price of xylo-oligosaccharide (XOS-95S) in China, 2014–2016



Source: CCM

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