

China Pentaerythritol Market Research

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Kcomber Inc.

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1. Introduction

The report provides you with detailed information of the pentaerythritol industry in China from the raw materials, import and export, consumption in major end-use segments and profiles of nine major pentaerythritol manufacturers in China.

The key points of this report are listed as below::

- ✓ Pentaerythritol development in China
- ✓ Production of pentaerythritol in China
- ✓ Import and export analysis
- ✓ Consumption of pentaerythritol in China
- ✓ Future forecast
- ✓ Profiles of pentaerythritol manufacturer

2. Approach for this report

The report is drafted by diverse methods as follows:

1) Desk research

The sources of desk research are various, including published magazines, journals, government statistics, industrial statistics, Customs statistics, association seminars as well as information from the Internet. A lot of work has gone into compilation and analysis of the obtained information. When necessary, checks were made with Chinese pentaerythritol suppliers regarding market information such as key producers, key end-users, production and export and so on.

2) Telephone interview

CCM has carried out extensive telephone interviews in order to grasp the actual market situation of pentaerythritol in China.

Interviewees cover:

- Producers
- End-users
- Traders
- Associations

3) Internet

CCM contacted with players in this industry through B2B websites.

Data processing and presentation

The data collected and compiled were sourced from:

- CCM's own database
- Published articles from periodicals, magazines and journals
- Statistics from governments and international institutes
- Telephone interviews with domestic suppliers, end-users, government, industrial experts
- Third-party data providers
- Information from the Internet

The data from various sources have been combined and cross-checked to make this report as precise and scientific as possible. Throughout the process, a series of internal discussions were made in order to analyse the data and have conclusions drawn.

3. Executive summary

Facing with increasingly stringent environmental standards, high production costs and other factors, China's pentaerythritol industry is still in tough situation.

- Production

As the world's largest producer of pentaerythritol, China had a capacity of XXX t/a as of 2017. In 2017, China's pentaerythritol output was XXX tonnes, up by XXX% year on year. Specifically, the output volume of dipentaerythritol and tripentaerythritol increased in 2017. It can be seen that the product structure of pentaerythritol is continuously improving, and manufacturers are gradually turning to better quality pentaerythritol.

In 2017, there were XXX active producers of pentaerythritol in China, among which, Jiangsu Kailin Ruiyang Chemical Co., Ltd. (Jiangsu Ruiyang) and Hubei Yihua Chemical Industry Co., Ltd. (Hubei Yihua) were XXX leading pentaerythritol producers in domestic market. They stopped some of their pentaerythritol production lines. In the same period, most specifications of pentaerythritol were in a normal sale, but XXX% pentaerythritol was in a tight supply.

- Consumption

In China, pentaerythritol is mainly consumed in the production of alkyd resin, polyurethane (PU), synthetic lubricant, rosin pentaerythritol ester. In 2017, the consumption volume of pentaerythritol in alkyd resin, the key downstream product of pentaerythritol, was XXX tonnes. It is estimated that the demand from alkyd resin for pentaerythritol will decrease slowly in the future.

- Import and export

In 2017, China's import volume and export volume of pentaerythritol were XXX tonnes and XXX tonnes respectively, up by XXX% and XXX% year on year respectively. And China's export volume of dipentaerythritol was XXX tonnes, up by XXX% year on year, reflecting increase in demand for high quality pentaerythritol from the overseas market.

The US, Taiwan Province and South Korea were the three largest export destinations of China's pentaerythritol by volume, together accounting for more than XXX% of the national total export volume in 2017, while Sweden, Taiwan Province and Germany were the three largest import origins of pentaerythritol to China by volume, together accounting for more than XXX% of the national total import volume.

4. What is in the report

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2 Production of pentaerythritol in China

2.1 Supply of major raw materials of pentaerythritol

Major raw materials for pentaerythritol production in China include methanol, formaldehyde, acetaldehyde, sodium hydroxide and sulfuric acid. ...

Table 2.1-1 Unit consumption of major raw materials for pentaerythritol production in China

Raw material	Specification	Unit consumption, kg/t
Methanol	XXX	XXX
Formaldehyde	XXX	XXX
Acetaldehyde	XXX	XXX
Sodium hydroxide	XXX	XXX
Sulfuric acid	XXX	XXX

Source: CCM

- Methanol

...

Table 2.1-2 Production, import, export and apparent consumption of methanol in China, 2011–2017

Year	Capacity (t/a)	Output (tonne)	Import volume (tonne)	Export volume (tonne)	Apparent consumption volume (tonne)
2011	XXX	XXX	XXX	XXX	XXX
2012	XXX	XXX	XXX	XXX	XXX
2013	XXX	XXX	XXX	XXX	XXX
2014	XXX	XXX	XXX	XXX	XXX
2015	XXX	XXX	XXX	XXX	XXX
2016	XXX	XXX	XXX	XXX	XXX
2017	XXX	XXX	XXX	XXX	XXX

Source: China Customs and CCM

...

Figure 2.1-1 Ex-works price of 99.9% purified methanol in China, Jan. 2013–Dec. 2017



Source: CCM

...

2.4 Production of pentaerythritol

...

Figure 2.4-1 Capacity and output of pentaerythritol in China, 2011–2017



Source: CCM

Table 2.4-1 Output of monopentaerythritol, dipentaerythritol and tripentaerythritol in China, 2011–2017, tonne

Year	Monopentaerythritol	Dipentaerythritol	Tripentaerythritol
2011	XXX	XXX	XXX
2012	XXX	XXX	XXX
2013	XXX	XXX	XXX
2014	XXX	XXX	XXX
2015	XXX	XXX	XXX
2016	XXX	XXX	XXX
2017	XXX	XXX	XXX

Source: CCM

Table 2.4-4 Capacity and output of dipentaerythritol producers in China, 2014–2017

No.	Producer	Capacity, t/a	Output, tonne			
		2017	2017	2016	2015	2014
1	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	XXX	XXX	XXX	XXX	XXX
3	XXX	XXX	XXX	XXX	XXX	XXX
4	XXX	XXX	XXX	XXX	XXX	XXX
5	XXX	XXX	XXX	XXX	XXX	XXX
6	XXX	XXX	XXX	XXX	XXX	XXX
7	XXX	XXX	XXX	XXX	XXX	XXX
8	XXX	XXX	XXX	XXX	XXX	XXX
Total		XXX	XXX	XXX	XXX	XXX

Note: 1. XXX

2. XXX

Source: CCM

...

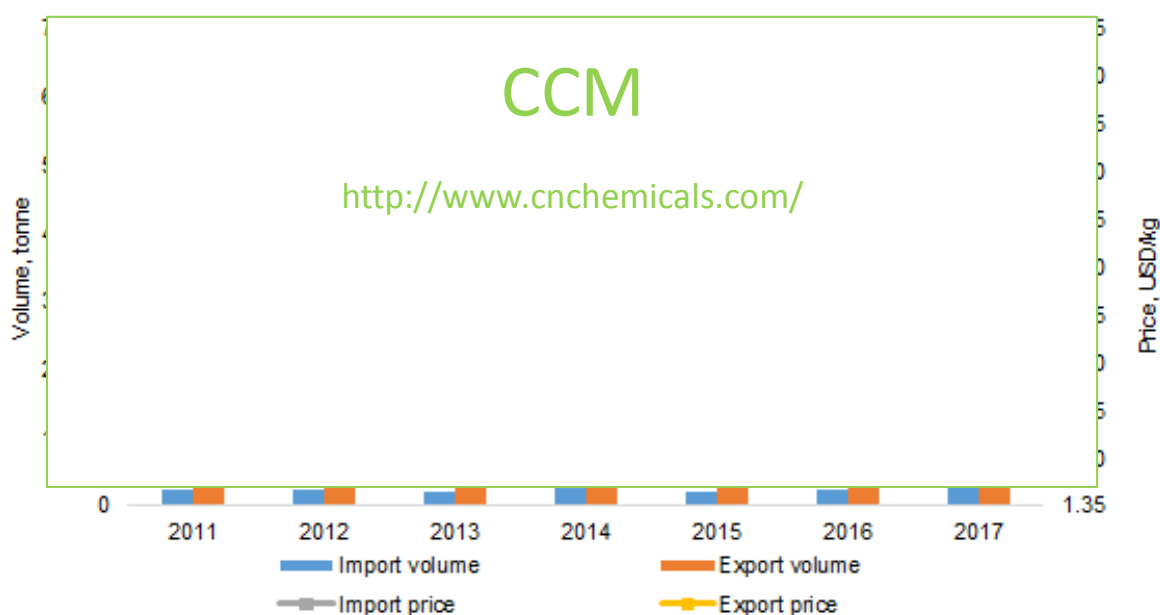
5 Import and export analysis

5.2 Import and export of pentaerythritol, 2015–2017

China has been a net exporter of pentaerythritol since 2003. During 2011 and 2016, China's annual pentaerythritol export volumes exceeded XXX tonnes, while the annual import volumes kept under XXX tonnes stably. In 2017, China's pentaerythritol export volume scarcely changed compared with that in 2016, while the country's pentaerythritol import volume soared by XXX% year on year and surpassed XXXtonnes for the first time since 2003.

In 2017, China's pentaerythritol import prices averaged USDXXX/t, up by XXX% year on year; average export price hit USDXXX/t, up by XXX% year on year, USDXXX/t higher than average import price. CCM believes this shrinkage should be attributed to two reasons:

Figure 5.2-1 China's imports and exports of pentaerythritol, 2011–2017



Source: China Customs & CCM

Table 5.2-1 China's imports and exports of pentaerythritol, 2011–2017

Year	Import			Export		
	Volume, tonne	Value, USD	Price, USD/kg	Volume, tonne	Value, USD	Price, USD/kg
2011	XXX	XXX	XXX	XXX	XXX	XXX
2012	XXX	XXX	XXX	XXX	XXX	XXX
2013	XXX	XXX	XXX	XXX	XXX	XXX
2014	XXX	XXX	XXX	XXX	XXX	XXX
2015	XXX	XXX	XXX	XXX	XXX	XXX
2016	XXX	XXX	XXX	XXX	XXX	XXX
2017	XXX	XXX	XXX	XXX	XXX	XXX

Source: China Customs & CCM

6 Consumption of pentaerythritol in China

6.1 Consumption pattern

...

Figure 6.1-1 Apparent consumption of pentaerythritol in China by end use segment, 2017



Source: CCM

...

9 Profile of pentaerythritol manufacturers

9.1 Active manufacturers

9.1.1 Jiangsu Kailin Ruiyang Chemical Co., Ltd.

...

Table 9.1.1-1 Capacity and output of pentaerythritol in Jiangsu Ruiyang, 2011–2017

Year	2011	2012	2013	2014	2015	2016	2017
Capacity, t/a	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Output, tonne	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Note: XXX

Source: CCM

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