

China Pentaerythritol Market Research

The Twentieth Edition
May 2024

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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 ten 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 manufacturers

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 will be 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 analyze the data and have conclusions drawn.

3. Executive summary

Facing with increasingly stringent environmental standards, high production costs, fierce competition and other factors, China's pentaerythritol industry structure has been continuously optimized and upgraded.

- Production

As the world's largest producer of pentaerythritol, China had XXX t/a production capacity as of 2023. In 2023, China's pentaerythritol output was XXX tonnes, down XXX year on year, but the output of dipentaerythritol increased by XXX year on year.

In 2023, there were ten active pentaerythritol producers in China, among which, Hubei Yihua Chemical Industry Co., Ltd. (Hubei Yihua) and Chifeng Ruiyang Chemical Co., Ltd. (Chifeng Ruiyang) were two leading pentaerythritol producers in domestic market.

- Consumption

In China, pentaerythritol is mainly consumed in the production of alkyd resin, polyurethane, synthetic lubricant, rosin pentaerythritol ester. In 2023, pentaerythritol consumption in the key downstream sector alkyd resin was XXX tonnes. It is estimated that the demand from alkyd resin will shrink slowly in the future.

- Import and export

In 2023, China's import volume of pentaerythritol was XXX tonnes, up XXX year on year, while the export volume was XXX tonnes, down XXX year on year. Specifically, China exported XXX tonnes of dipentaerythritol, which is a XXX year-on-year decrease.

South Korea, Brazil and Taiwan Province were the three largest export destinations of China's pentaerythritol by volume, together accounting for XXX of the national total export volume in 2023. Sweden was the top import origin of pentaerythritol to China by volume, followed by Taiwan Province and Germany. China's import volume from Sweden accounted for XXX of the national total in 2023.

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. These raw materials are fairly abundant in China, so the production of pentaerythritol is much more affected by its demand and price than by the supply of its raw materials.

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

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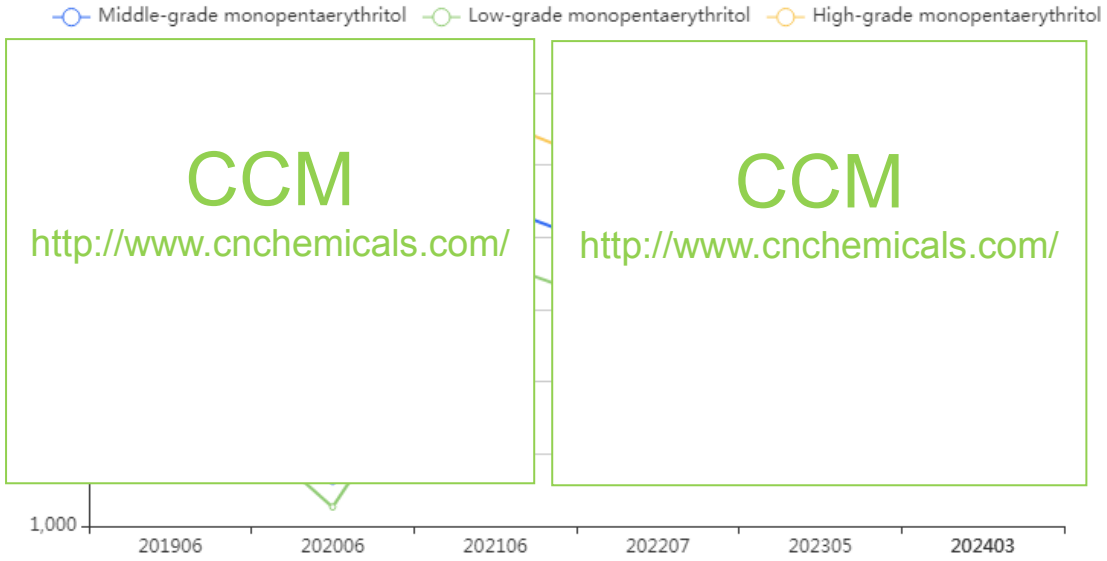
2.2 Price of pentaerythritol

- Price of monopentaerythritol

In recent five years, China's ex-works prices of monopentaerythritol substantially fluctuated but basically remained under XXX.

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Figure 2.2-1 Ex-works price of monopentaerythritol in China, 2019–2024

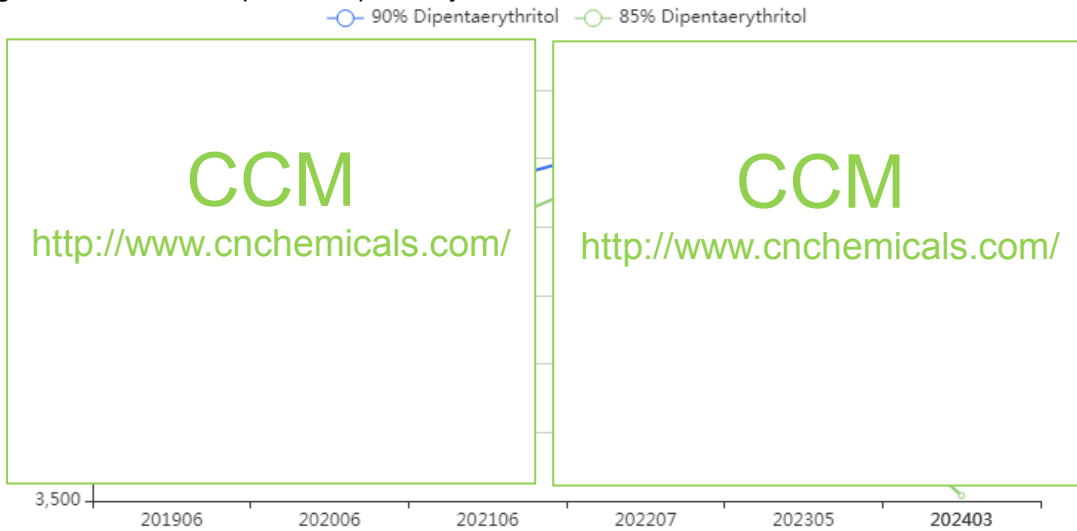


Source: CCM

- Price of dipentaerythritol

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Figure 2.2-2 Ex-works price of dipentaerythritol in China, 2019–2024



Source: CCM

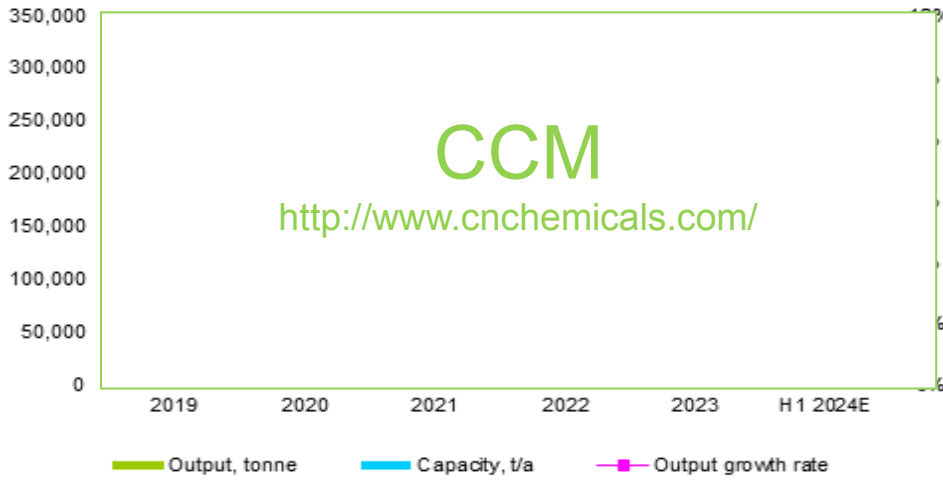
2.3 Geographical distribution of producers

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2.4 Production of pentaerythritol

...

Figure 2.4-1 Capacity and output of pentaerythritol in China, 2019–H1 2024



Source: CCM

Table 2.4-1 Output of monopentaerythritol, dipentaerythritol and tripentaerythritol in China, 2019–H1 2024, tonne

Year	Monopentaerythritol	Dipentaerythritol	Tripentaerythritol
2019	XXX	XXX	XXX
2020	XXX	XXX	XXX
2021	XXX	XXX	XXX
2022	XXX	XXX	XXX
2023	XXX	XXX	XXX
H1 2024	XXX	XXX	XXX

Source: CCM

...

So far in H1 2024, there are XXX active dipentaerythritol producers in China, with total capacity of XXX t/a. Dipentaerythritol used to be merely a byproduct of monopentaerythritol, but has become a critical part of manufacturers' product portfolio now.

...

Table 2.4-4 Capacity and output of dipentaerythritol producers in China, 2021–H1 2024

No.	Producer	Capacity H1 2024, t/a	Output, tonne			
			2021	2022	2023	H1 2024
1	Chifeng Ruiyang	XXX	XXX	XXX	XXX	XXX
2	XXX	XXX	XXX	XXX	XXX	XXX
...	XXX	XXX	XXX	XXX	XXX	XXX
Total		XXX	XXX	XXX	XXX	XXX

Source: CCM

...

3 Production technology of pentaerythritol in China

3.1 Brief introduction and comparison of different production pathways/methods

Technology pathway of pentaerythritol

Based on different condensing agents, the preparation for pentaerythritol can be classified into XXX and XXX.

...

Table 3.1-1 Monopentaerythritol technology source of Chinese producers, 2023

No.	Producer	Capacity '23, t/a	Pathway	Technology source
1	Hubei Yihua	XXX	XXX	XXX
2	XXX	XXX	XXX	XXX
...	XXX	XXX	XXX	XXX

Source: CCM

...

4 Industry analysis in China

4.1 SWOT analysis

Table 4.1-1 SWOT analysis of Hubei Yihua's development in 2023

Hubei Yihua	Strength	Weakness
XXX	XXX	XXX
Opportunity	SO	WO
XXX	XXX	XXX
Threat	ST	WT
XXX	XXX	XXX

Source: CCM

...

5 Import and export analysis

5.2 Import and export of pentaerythritol, 2023

In 2019, the annual export of pentaerythritol remained above XXX tonnes. But the export volume dropped by some XX% year on year in 2020, due to sluggish overseas demand influenced by COVID-19. However, it surged to XXX tonnes in 2021 with recovered overseas demand. In 2022, the export volume dropped to nearly XXX tonnes because of decreased overseas demand. In 2023, China's export volume of pentaerythritol reached a new high of XXX tonnes due to the deregulation of COVID-19 and the increase in new export orders.

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Figure 5.2-1 China's imports and exports of pentaerythritol, 2019–2023



Source: China Customs & CCM

...

Figure 5.2-3 Top ten export destinations of pentaerythritol from China by volume, 2023



Source: China Customs & CCM

6 Consumption of pentaerythritol in China

6.1 Consumption pattern

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Figure 6.1-1 Apparent consumption of pentaerythritol in China by end use segment, 2023

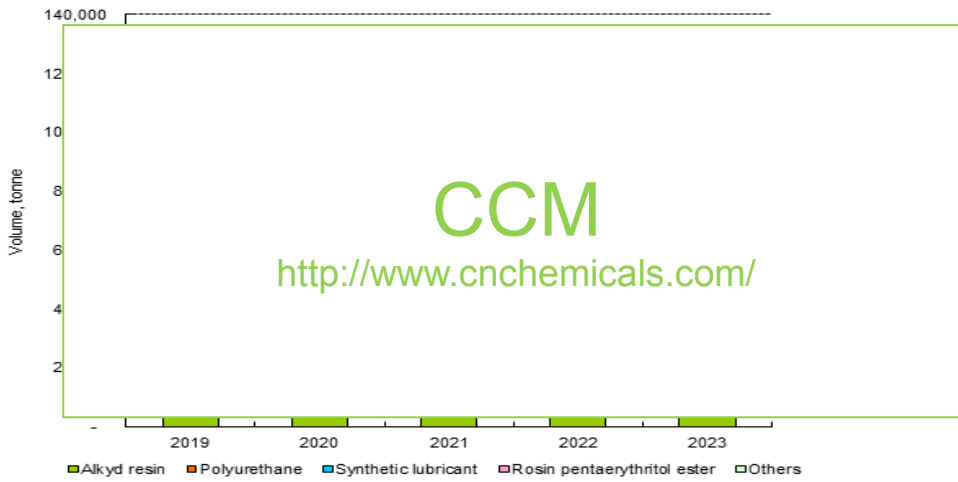


Source: CCM

6.2 Consumption in major end-use segments

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Figure 6.2-1 Apparent consumption of pentaerythritol in China by end-use segment, 2019–2023



Source: CCM

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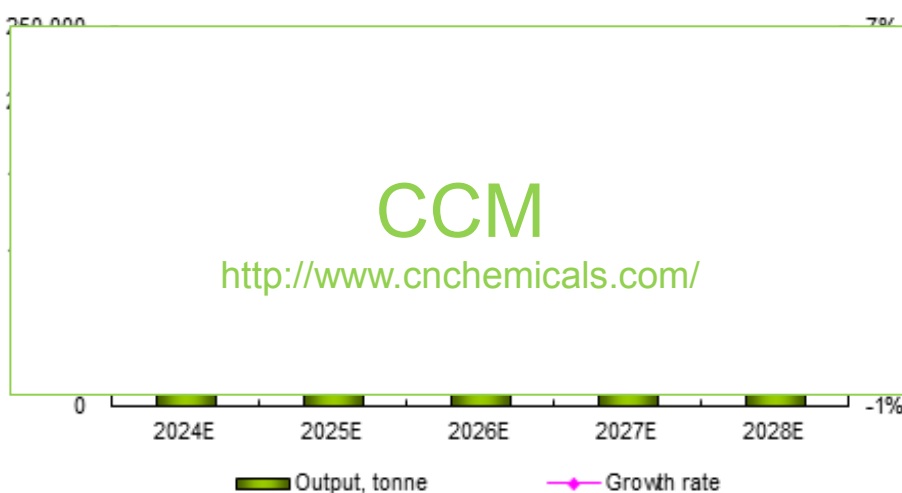
7 Future forecast

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7.2 Outlook for pentaerythritol industry, 2024–2028

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Figure 7.2-1 Forecast on pentaerythritol output in China, 2024–2028



Source: CCM

...

9 Profile of active pentaerythritol manufacturers

9.1 Chifeng Ruiyang Chemical Co., Ltd.

Table 9.1-1 Capacity and output of pentaerythritol in Chifeng Ruiyang, 2019–H1 2024

Year	2019	2020	2021	2022	2023	H1 2024
Capacity, t/a	XXX	XXX	XXX	XXX	XXX	XXX
Output, tonne	XXX	XXX	XXX	XXX	XXX	XXX

Source: CCM

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