

Production and Market of Paraformaldehyde in China

The Nineteenth Edition

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Researched & Prepared by:

Kcomber Inc.

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1. Introduction

This 17th edition PF report, formulated in March 2023, focuses on the situation of China's paraformaldehyde (PF) industry in 2020 and Q3 2023, as well as forecasting its future development trend. The report aims to disclose the latest production and market information of China's PF industry. The data for 2022 and before are based on CCM's database and other various sources as mentioned in the section of methodology below.

2. Approach for this report

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. Where necessary, information has been checked and discussed internally related to market structure and performance characteristics as key producers, key end users, production levels, end user demand and so on.

- Field survey

CCM has conducted an extensive field survey using telephone interviews in order to survey the PF market in China.

The interviewees included the following groups:

- Key producers
- Key end users
- Key traders
- Material suppliers
- Associations involved
- Industry experts

- Network search

CCM employs a 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 analyze the data and draw appropriate conclusions.

3. Executive summary

China's paraformaldehyde (PF) industry has witnessed a fast development in the past ten years. The output of PF increased greatly, with a CAGR of XXX% from 2013 to 2022.

- Production

Domestic PF production is mainly distributed in Hebei, Jiangsu, and Shandong, relying on abundant supply of methanol and convenient transportation.

XXX companies stopped PF production completely in 2018 and XXX companies stopped production in 2019 and 2020 respectively. The number of PF producers in China decreased from XXX in 2017 to XXX in 2022. The national total capacity increased with fluctuations in 2017–2022, rising to XXX t/a in 2022, and the output in China rose from XXX tonnes in 2017 to XXX tonnes in 2022, driven by increasing demand at home and abroad.

- Import and export

Before 2020, China is a net PF importer. However, China's PF import volume was less than export for the first time in 2020. In 2022, China imported XXX tonnes of PF. The top three import origins were Spain, Taiwan Province and the US, with a combined share of XXX of the total.

China's export volume of PF kept decreasing in 2015–2018. The downtrend reversed in 2019, with PF export volume jumping XXX year on year due to a decline in PF supply in Taiwan Province. As COVID-19 hit hard foreign production of PF in 2021–2022, China's PF export increased to above XXX tonnes in the past two years.

The PF export volume of the top five destinations (Djibouti, South Korea, Nigeria, Kenya and Myanmar, over XXX tonnes each) in 2022 together accounted for XXX of year's national total.

- Technology

In China, there are two main technologies to produce PF, namely rake drying method and spray drying method. Although the rake drying method still lags behind the spray drying method both in quality and environmental friendliness, it is adopted by most Chinese PF producers due to its low investment amount. In 2022, altogether XXX PF producers adopted rake drying method with a share of XXX by capacity.

- Price

Generally, the price fluctuation of PF in China is greatly influenced by raw materials, methanol or formaldehyde. In 2022, the ex-works price of PF declined, with volatilities following the ups and downs in the prices of formaldehyde and methanol.

- Consumption

In China, PF is mainly consumed in agrochemical, resin and pharmaceutical industries, etc. The agrochemical industry is the largest consumption field of PF, taking up XXX of the total domestic PF consumption in 2022. Glyphosate technical (AEA pathway) is the largest end-use segment, and the consumption of PF in glyphosate accounted for XXX of the national total in 2022. The consumption of PF in resin industry occupied XXX share to the national total in 2022.

4. What's in this report?

Note: Key data/information in this sample page is hidden, while in the report it is not.

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2 Production situation of paraformaldehyde in China

2.1 Producers in China

XXX companies related to PF were studied. As of March 2023, CCM finds,

- XXX of them are active producers;
- XXX of them suspended production;
- XXX of them stopped production completely;
- XXX of them are potential producers.

These XXX potential producers include those finished construction but have not put into production yet, those under construction and those have just published environment impact assessment of PF projects as of March 2023.

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Table 2.1-2 Capacity and output of major PF producers in China, 2020–Q1 2023

No.	Producer	2020		2021		2022		Q1 2023	
		Capacity, t/a	Output, tonne	Capacity, t/a	Output, tonne	Capacity, t/a	Output, tonne	Capacity, t/a	Output, tonne
1	Fuhua Tongda	60,000	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	Hebei Jintaida	40,000	XXX	XXX	XXX	XXX	XXX	XXX	XXX
3	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
4	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
5	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

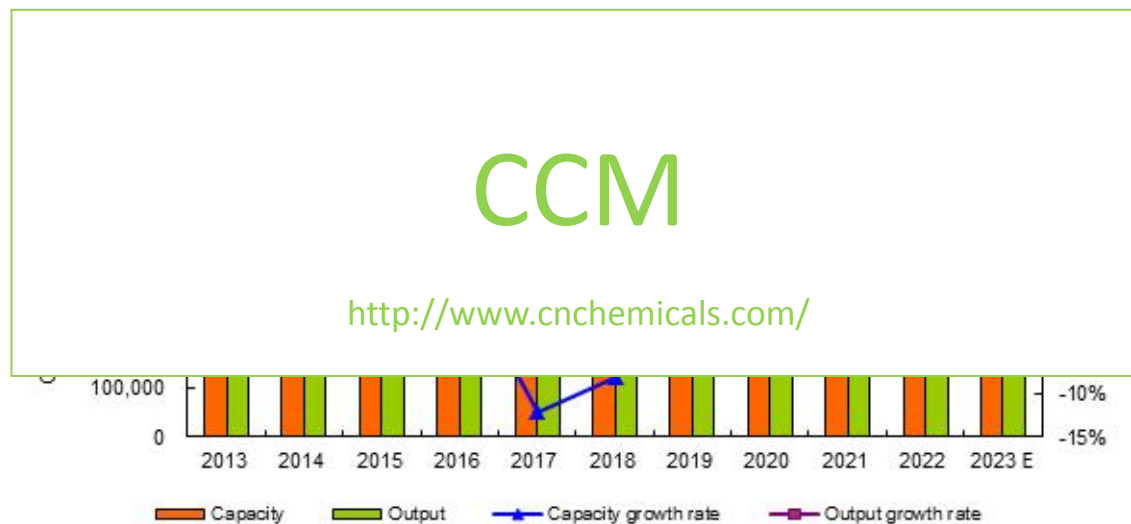
Source: CCM

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2.2 Capacity and output

After years of rapid growth, China's PF capacity kept increasing from XXX t/a in 2006 to XXX t/a in 2011, but it decreased to XXX t/a in 2012 because several small PF producers, which had weak competitiveness under the circumstances of overcapacity and sluggish PF market, stopped PF production. The PF capacity increased sharply in 2013 along with the launch of some new PF production lines and had a slight increase to XXX t/a in 2014 because Jiangsu Sanmu launched its XXX t/a PF project.

Figure 2.2-1 Capacity and output of PF in China, 2013–2023E



Note: "E" means estimated.

Source: CCM

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3 Import & export analysis of paraformaldehyde in China

3.1 Overall situation of PF trading

The domestic PF is more and more popular with customers at home and abroad, because of its high quality and low price in recent years. From 2010 to 2014, the export volume of PF in China kept increasing, while the import volume of PF fluctuated.

In 2015, both export volume and import volume of PF in China decreased, down by XXX% and XXX% respectively compared with those in 2014.

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Table 3.1-1 China's imports and exports of PF, 2003–2022

Year	Import			Export		
	Import volume, tonne	Import value, USD	Average price, USD/t	Export volume, tonne	Export value, USD	Average price, USD/t
2000	XXX	XXX	XXX	XXX	XXX	XXX
2001	XXX	XXX	XXX	XXX	XXX	XXX
2002	XXX	XXX	XXX	XXX	XXX	XXX

...
2018	XXX	XXX	XXX	XXX	XXX	XXX
2019	XXX	XXX	XXX	XXX	XXX	XXX

Source: China Customs

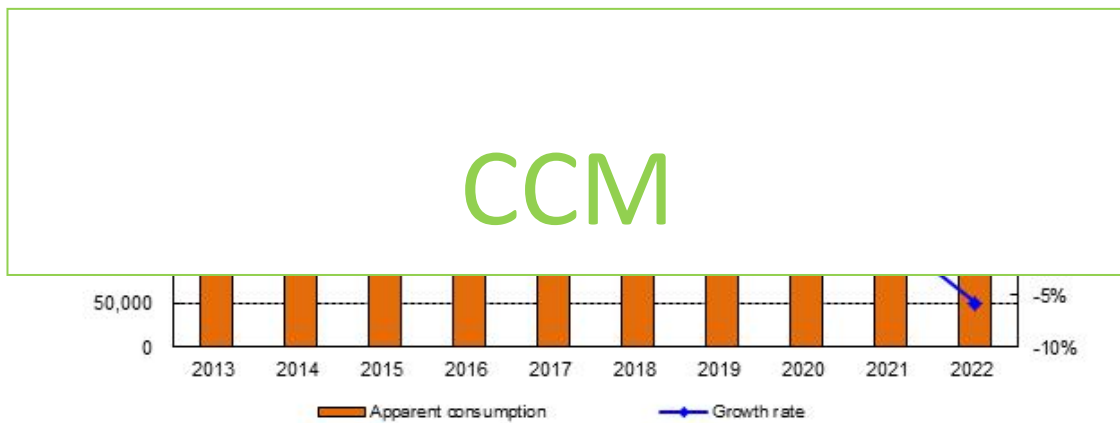
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4 End use segments of paraformaldehyde in China

4.1 Consumption pattern

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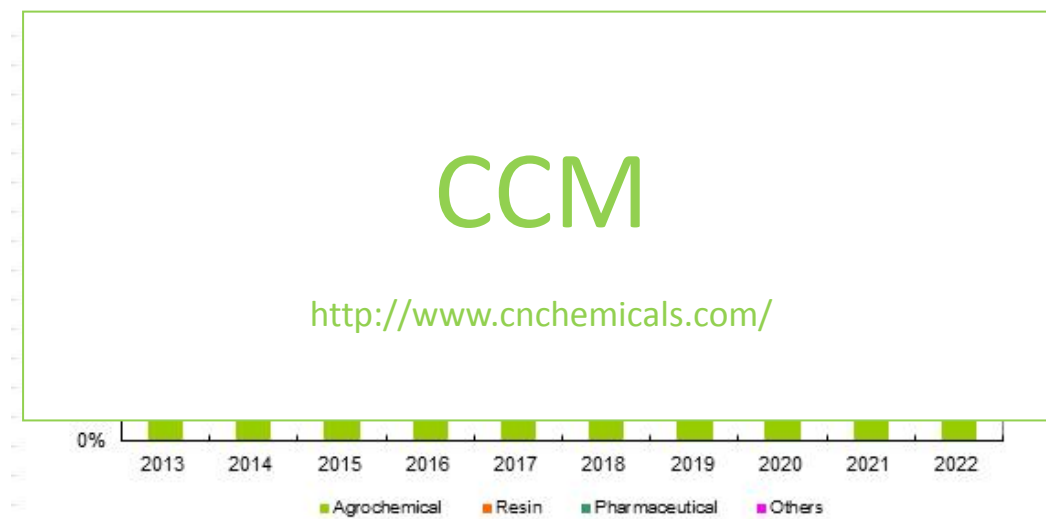
Figure 4-1 Apparent consumption of PF and its growth rate in China, 2013–2022



Source: CCM

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Figure 4-2 Consumption pattern of PF in China by downstream industry, 2013–2022



Source: CCM

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5 Forecast on paraformaldehyde industry in China

5.2 Supply and demand forecast on PF 2023–2027

Demand forecast to 2027

In 2022, domestic glyphosate industry contributed to about XXX of the domestic demand for PF. The future trend of PF demand in China will be similar with the development trend of domestic production of glyphosate technical.

Demand for PF in China is expected to keep increasing from 2023 to 2027. It's predicted that demand for PF will be XXX tonnes in China in 2027, growing at a CAGR of XXX in 2023–2027.

Figure 5.2-1 Forecast on demand for PF in China, 2023–2027



Source: CCM

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If you want more information, please feel free to contact us.

Tel: +86-20-37616606 Fax: +86-20-37616968

Email: econtact@cnchemicals.com