

Survey of Phosphorus Industry in China

The Sixth Edition

June 2021

Researched & Prepared by:

Kcomber Inc.

Copyright by Kcomber Inc.

Any publication, distribution or copying of the content in this report is prohibited.



Contents

| | |
|---|-----------|
| Executive summary | 1 |
| Methodology | 2 |
| 1 Phosphate rock | 4 |
| 1.1 Overview of global phosphate rock | 4 |
| 1.2 Phosphate rock in China | 6 |
| 1.2.1 Distribution of phosphate rock reserves, 2020 | 6 |
| 1.2.2 Output of phosphate rock, 2013–2020 | 8 |
| 1.2.3 Price of phosphate rock, 2016–2020..... | 8 |
| 1.2.4 Export analysis of phosphate rock, 2013–2020 | 10 |
| 2 Phosphate fertilizers in China | 12 |
| 2.1 Output of phosphate fertilizers, 2013–2019 | 12 |
| 2.2 Prices of MAP and DAP, 2016–2020..... | 14 |
| 2.3 Export analysis of phosphate fertilizers, 2013–2020 | 15 |
| 3 Yellow phosphorus in China | 18 |
| 3.1 Capacity and output of yellow phosphorus, 2016–2020..... | 18 |
| 3.2 Price of yellow phosphorus, 2013–2020 | 19 |
| 3.3 Export analysis of yellow phosphorus, 2013–2020..... | 21 |
| 4 Key phosphorus producers in China, 2020 | 23 |

LIST OF TABLES

| |
|---|
| Table 1.1-1 Global phosphate rock output and economic reserves, 2016–2020, '000 tonne |
| Table 1.2.1-1 Average P ₂ O ₅ content of phosphate rock in China by region, 2020 |
| Table 1.2.2-1 Output of phosphate rock in China by region, 2020 |
| Table 1.2.3-1 Ex-works price of 29% phosphate rock in China, 2016–2020 |
| Table 2.1-1 Top 10 phosphate fertilizer (converted to 100% P ₂ O ₅) regions in China by output, 2019 |
| Table 3.3-1 China's exports of yellow phosphorus by destination, 2020 |
| Table 4-1 List of major phosphate rock producers in China, 2020 |
| Table 4-2 List of major phosphate fertilizer producers in China, 2020 |
| Table 4-3 List of major yellow phosphorus producers in China, 2017–2020 |

LIST OF FIGURES

| |
|--|
| Figure 1.1-1 Global phosphate rock output, 2013–2020 |
| Figure 1.1-2 Distribution of global phosphate rock marketable reserves by region, 2020 |
| Figure 1.2.1-1 Distribution of phosphate rock reserves in China by region, 2020 |
| Figure 1.2.1-2 Distribution of phosphate rock reserves in China by grade, 2020 |
| Figure 1.2.2-1 Output of phosphate rock in China, 2013–2020 |



- Figure 1.2.3-1 Monthly ex-works price of 29% phosphate rock in China, 2019–2020
- Figure 1.2.3-2 Monthly ex-works price of phosphate rock in China by region, 2019–2020
- Figure 1.2.4-1 China's export volume of phosphate rock, 2013–2020
- Figure 1.2.4-2 Annual average export prices of phosphate rock from China, 2017–2020
- Figure 2.1-1 Output of phosphate fertilizers (converted to 100% P₂O₅) in China, 2013–2019
- Figure 2.1-2 Output distribution of phosphate fertilizers (converted to 100% P₂O₅) in China by region, 2019
- Figure 2.1-3 Output of monoammonium phosphate (MAP) in China, 2013–2020
- Figure 2.1-4 Output of diammonium phosphate (DAP) in China, 2013–2020
- Figure 2.2-1 Monthly ex-works price of 55% powder monoammonium phosphate (MAP) in China, Jan. 2016–Dec. 2020
- Figure 2.2-2 Monthly ex-works price of 64% diammonium phosphate (DAP) in China, Jan. 2016–Dec. 2020
- Figure 2.3-1 China's export volume of monoammonium phosphate (MAP), 2013–2020
- Figure 2.3-2 China's export volume of diammonium phosphate (DAP), 2013–2020
- Figure 2.3-3 Monthly exports of monoammonium phosphate (MAP) from China, Jan. 2016–Dec. 2020
- Figure 2.3-4 Monthly exports of diammonium phosphate (DAP) from China, Jan. 2016–Dec. 2020
- Figure 3.1-1 Capacity and output of yellow phosphorus in China, 2016–2020
- Figure 3.1-2 Capacity distribution of yellow phosphorus in China, 2020
- Figure 3.1-3 Output distribution of yellow phosphorus in China, 2020
- Figure 3.2-1 Annual average ex-works price of yellow phosphorus in China, 2013–2020
- Figure 3.2-2 Monthly ex-works price of yellow phosphorus in China, Jan. 2013–Dec. 2020
- Figure 3.2-3 Monthly ex-works price of yellow phosphorus in China by region, Jan. 2016–Dec. 2020
- Figure 3.3-1 China's export volume of yellow phosphorus, 2013–2020
- Figure 3.3-2 Monthly exports of yellow phosphorus from China, Jan. 2016–Dec. 2020

1. Introduction

China has become one of the biggest phosphorus producers and exporters in the world after 20 years of fast expansion. A relatively complete industrial system for phosphorus industry has been established in China, flowing from mining of phosphate rock, to production of basic and fine phosphorus chemicals.

Survey of Phosphorus Industry in China, finished in June 2021, is CCM's sixth edition report on China's phosphorus industry. This intelligent report attaches importance to the following parts:

- Global phosphate rock reserves and output
- China's phosphate rock reserves, output, price and exports
- China's phosphate fertilizer output, price and exports
- China's yellow phosphorus capacity, output, price and exports

2. Approach for this report

This report is based on data collected with diverse methods, which are listed as follows:

Desk research

This includes access to published magazines, journals, government, industry and customs statistics, association seminars as well as information from the Internet. A lot of work has gone into the compilation and analysis of the obtained information. Data collected and compiled are variously sourced from:

- CCM's database
- Published articles from periodicals, magazines, journals, and third party database.
- Statistics from governments and international institutes
- Customs statistics
- Comments from industrial experts on various platforms
- Information from the Internet

Telephone interview targets

- Key producers
- Key traders
- Industrial associations
- Industrial experts

Data compilation and crosscheck

Data obtained from various sources have been combined and cross-checked to ensure that this report is as accurate and methodologically sound as possible.

3. Executive summary

Global phosphate rock reserves are primarily distributed in Morocco and Western Sahara. In China, most of the phosphate rock reserves are distributed in Hubei, Yunnan, Guizhou, Hunan, and Sichuan provinces.

Since 2017, many countries have reduced phosphate rock output for grain sustainable development and environmental protection. And here in China, under exploitation restriction, the output saw a XXX year-on-year decline in 2020.

As a key phosphate fertilizer supplier in the world, China exported a large quantity of phosphate fertilizers every year. Monoammonium phosphate (MAP) and diammonium phosphate (DAP) account for more than XXX of the total output. In 2020, China's export volume of MAP and DAP were about XXX tonnes and XXX tonnes, with monthly average export prices of XXX and XXX respectively.

Due to tightening environmental regulations, many yellow phosphorous producers have shut down their production lines. Therefore, China's yellow phosphorus capacity has been on a downward trend in 2017–2019. In 2020, some yellow phosphorus enterprises in Guizhou, Yunnan and other places have passed acceptance check of technical reforms to meet the production resumption standard. The capacity of yellow phosphorus increased by XXX year on year to XXX t/a in 2020, and the output increased by XXX year on year to XXX tonnes, with an annual average ex-works price of XXX.

The majority of China's phosphorus industry players are located in regions with abundant phosphate rock reserves, such as Yunnan, Guizhou and Hubei provinces.

4. What is in the report?

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

...

1.1 Overview of global phosphate rock

...

Figure 1.1-1 Global phosphate rock output, 2013–2020



Source: United States Geological Survey (USGS), National Bureau of Statistics (NBS)

...

1.2.1 Distribution of phosphate rock reserves, 2020

In 2019, the proven phosphate rock reserves in China were some XXX million tonnes, which was basically unchanged in 2020. Most of the phosphate rock reserves in China are distributed in Hubei, Yunnan, Guizhou, Hunan and Sichuan provinces.

...

Figure 1.2.1-1 Distribution of phosphate rock reserves in China by region, 2020



Source: CCM

Table 1.2.1-1 Average P₂O₅ content of phosphate rock in China by region, 2020

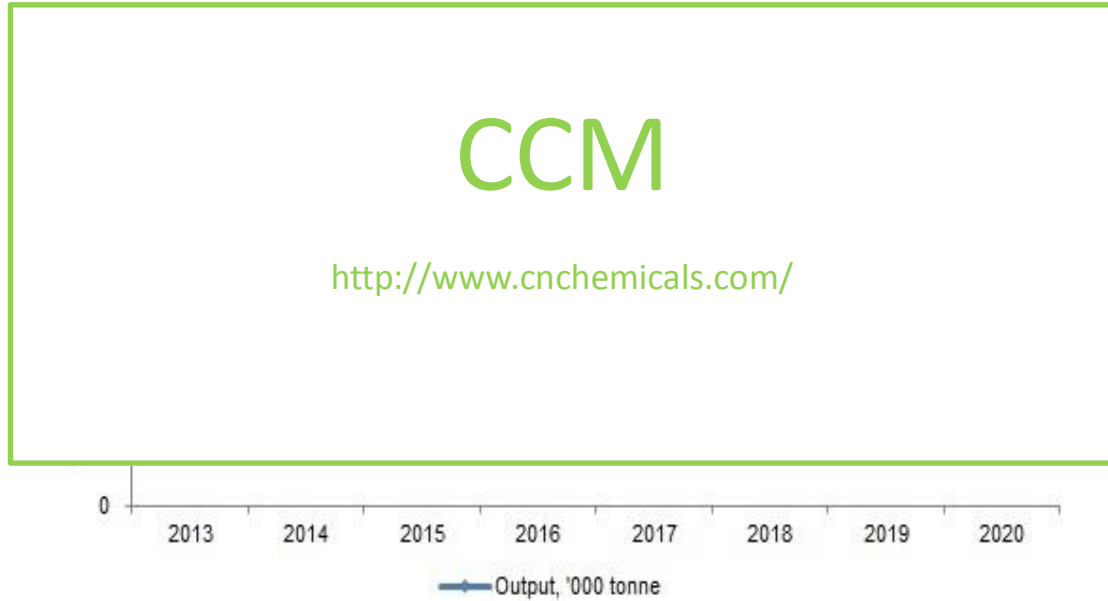
| Region | Average P ₂ O ₅ content |
|------------------|---|
| Hubei Province | XXX |
| Guizhou Province | XXX |
| Yunnan Province | XXX |
| Sichuan Province | XXX |
| Hunan Province | XXX |

Source: CCM

1.2.2 Output of phosphate rock, 2013–2020

...

Figure 1.2.2-1 Output of phosphate rock in China, 2013–2020



Source: NBS

...

1.2.3 Price of phosphate rock, 2016–2020

...

Figure 1.2.3-1 Monthly ex-works price of 29% phosphate rock in China, Jan. 2019–Dec. 2020

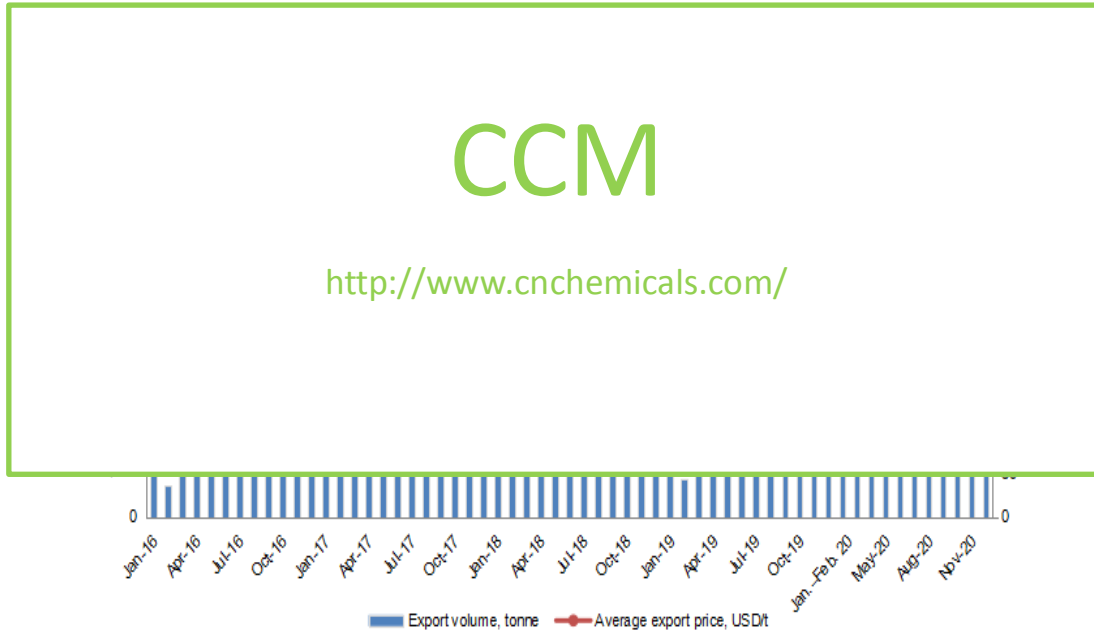


Source: CCM

2.3 Export analysis of phosphate fertilizers, 2013–2020

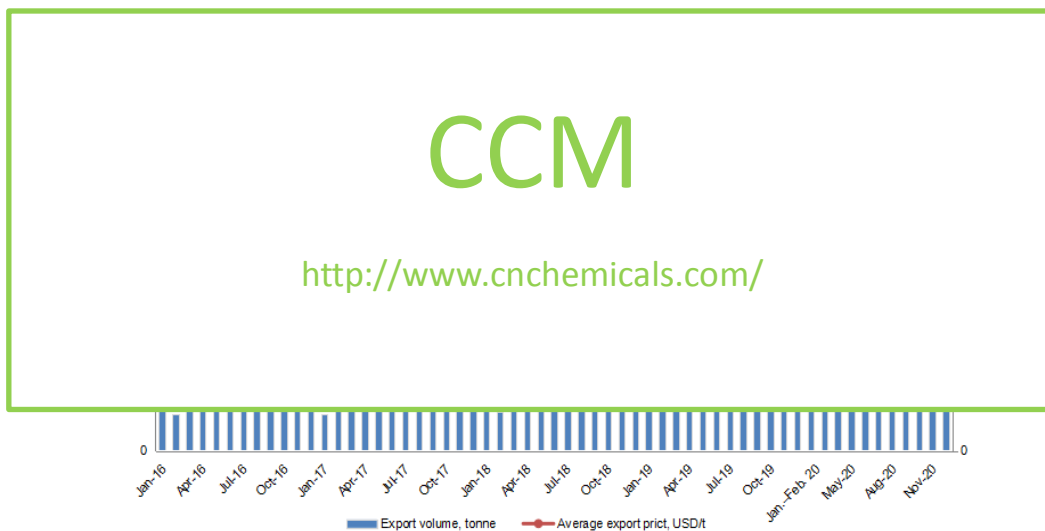
...

Figure 2.3-3 Monthly exports of monoammonium phosphate (MAP) from China, Jan. 2016–Dec. 2020



Source: China Customs, CCM

Figure 2.3-4 Monthly exports of diammonium phosphate (DAP) from China, Jan. 2016–Dec. 2020



Source: China Customs, CCM

...

3 Yellow phosphorus in China

...

3.2 Price of yellow phosphorus, 2013–2020

...

Figure 3.2-2 Monthly ex-works price of yellow phosphorus in China by region, Jan. 2016–Dec. 2020



Source: CCM

...

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

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

Email: econtact@cnchemicals.com