



**CCM** Data & Business  
Intelligence

# **Survey of Titanium Dioxide in China**

**The Twelfth Edition  
December 2023**

**Researched & Prepared by:**

**Kcomber Inc.**

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## 1. Introduction

*Survey of Titanium Dioxide in China*, finished in December 2023, is CCM's twelfth edition report on titanium dioxide industry. This intelligent report attaches importance to the following parts:

- ✓ Titanium dioxide production in China, 2020–2022
- ✓ Titanium dioxide and raw material prices in China, 2020–H1 2023
- ✓ Import and export analysis, 2020–2022
- ✓ Titanium dioxide consumption situation in China, 2020–2022



## **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. Where necessary, checks have been made with Chinese suppliers regarding market information such as key producers, key end users, production, export and demand and so on.

### **2) Telephone interview**

- Key producers
- Key end users
- Key traders
- Material suppliers
- Some associations
- Experts

### **Data compilation and crosscheck**

The data from various sources have been combined and cross-checked to make this report as precise and scientific as possible.

### 3. Executive summary

Recent years, China's titanium dioxide (TiO<sub>2</sub>) industry has been developing steadily. The period of 2020–2022 saw consecutive growth of TiO<sub>2</sub> capacity and output. In 2022, domestic TiO<sub>2</sub> capacity grew to XXX million t/a and the output came to about XXX million tonnes. With increasing concentration of the industry and manufacturers to obtain better production technology, it is estimated that TiO<sub>2</sub> production capacity in China will reach about XXX million t/a by 2027 and the output will approach XXX million tonnes.

So far, chloride process TiO<sub>2</sub> is at the initial stage in China, and sulphate process still dominates. Although some major domestic manufacturers have already built or are building chloride process projects, technical barriers, product quality and high cost of related facilities make the process unreachable to most producers. The upgrading of China's TiO<sub>2</sub> production techniques still has a long way to go.

The domestic price curve of TiO<sub>2</sub> in 2020–H1 2023 showed a XXX pattern. TiO<sub>2</sub> prices XXX in June or July 2020, then XXX till June 2021. After nearly yearlong fluctuations at a relatively high level, the prices XXX in H2 2022, and then in H1 2023, the prices XXX.

With high foreign demand and the continuous improvement in quality of domestic TiO<sub>2</sub>, the exports kept strong in 2020–2022, and China exported nearly XXX million tonnes of TiO<sub>2</sub> in 2022, the volume expanding at a CAGR of XXX during 2020–2022. The import volume of TiO<sub>2</sub> to China fluctuated in the same period; in 2022, it shrank to some XXX tonnes.

As one of the largest TiO<sub>2</sub> consumers worldwide, China sees its consumption fluctuate in recent years. In 2020–2022, domestic TiO<sub>2</sub> consumption increased from XXX million tonnes to XXX million tonnes and then declined to XXX million tonnes. Coating, plastics and papermaking industries remain the largest downstream markets for TiO<sub>2</sub>, accounting for XXX, XXX and XXX of the total in 2022. It is expected that in the next five years, these three industries will continue to lead the way in TiO<sub>2</sub> consumption.

#### 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 Titanium dioxide production, 2020–2022

The period of 2020–2022 saw consecutive growths of TiO<sub>2</sub> capacity and output in China.

Figure 1.1-1 Capacity and output of titanium dioxide in China, 2020–2022



Source: CCM

...

##### 1.2 Top 40 titanium dioxide suppliers, 2020–2022

...

In 2022, of all the domestic full-process TiO<sub>2</sub> manufacturers that maintained normal production, XXX manufacturers achieved XXX-tonne-above output. The output of these XXX enterprises altogether reached about XXX million tonnes, accounting for more than XXX of the total output. In particular, the largest Chinese TiO<sub>2</sub> producer LB Group produced XXX tonnes of TiO<sub>2</sub>.

Table 1.2-1 Titanium dioxide production of top active 40 suppliers in China, 2020–2022

| No. | Supplier           | Location of production base | Capacity, t/a |      |      | Output, tonne |      |      |
|-----|--------------------|-----------------------------|---------------|------|------|---------------|------|------|
|     |                    |                             | 2022          | 2021 | 2020 | 2022          | 2021 | 2020 |
|     | LB Group Co., Ltd. | Henan, XXX                  | XXX           | XXX  | XXX  | XXX           | XXX  | XXX  |
| ... | ...                | XXX                         | XXX           | XXX  | XXX  | XXX           | XXX  | XXX  |
| ... | ...                | XXX                         | XXX           | XXX  | XXX  | XXX           | XXX  | XXX  |
| ... | ...                | XXX                         | XXX           | XXX  | XXX  | XXX           | XXX  | XXX  |

Source: CCM

...



Figure 1.2-1 Capacity share of top 40 titanium dioxide suppliers by process in China, 2022



Source: CCM

Figure 1.2-2 Output share of top 40 titanium dioxide suppliers by process in China, 2022



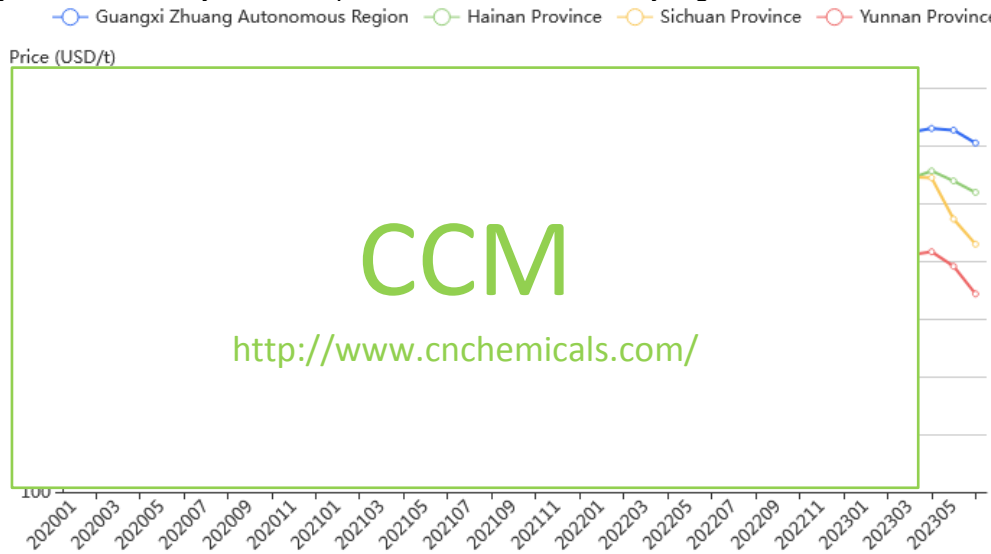
Source: CCM

...

## 2.1 Raw material price, 2020–H1 2023

...

Figure 2.1-1 Monthly ex-works price of ilmenite in China by region, Jan. 2020–June 2023



Note: Ilmenite grading: 45%–47% in Yunnan Province, 40%–46% in Sichuan Province, 45%–54% in Hainan Province and 50%–52% in Guangxi Zhuang Autonomous Region

Source: CCM

Figure 2.1-2 Monthly ex-works price of titanium slag (92%) in China by region, Jan. 2020–June 2023



Source: CCM

Figure 2.1-3 Monthly ex-works price of titanium slag (90%) in China by region, Jan. 2020–June 2023



Source: CCM

Figure 2.1-4 Ex-works prices of titanium slag (74%–76%) in China by region, Jan. 2020–June 2023



Source: CCM

## 2.2 TiO<sub>2</sub> price, 2020–H1 2023

...

Figure 2.2-1 Monthly ex-works prices of rutile titanium dioxide in China by region, Jan. 2020–June 2023



Source: CCM

Figure 2.2-2 Monthly ex-works prices of anatase titanium dioxide in China by region, Jan. 2020–June 2023



Source: CCM

### 3 Mainstream titanium dioxide suppliers, 2020–2022

#### 3.1 Overview

...

Table 3.1-1 List of domestic titanium dioxide suppliers with more than 100,000-tonne output, 2022

| No. | Supplier  | Note |
|-----|---|------|
| 1   | LB Group Co., Ltd.                                    | XXX  |
| 2   | CNNC Hua Yuan Titanium Dioxide Co., Ltd.              | XXX  |
| 3   | Pangang Group Vanadium & Titanium Resources Co., Ltd. | XXX  |
| 4   | XXX   | XXX  |
| ... | ...   | ...  |

Source: CCM

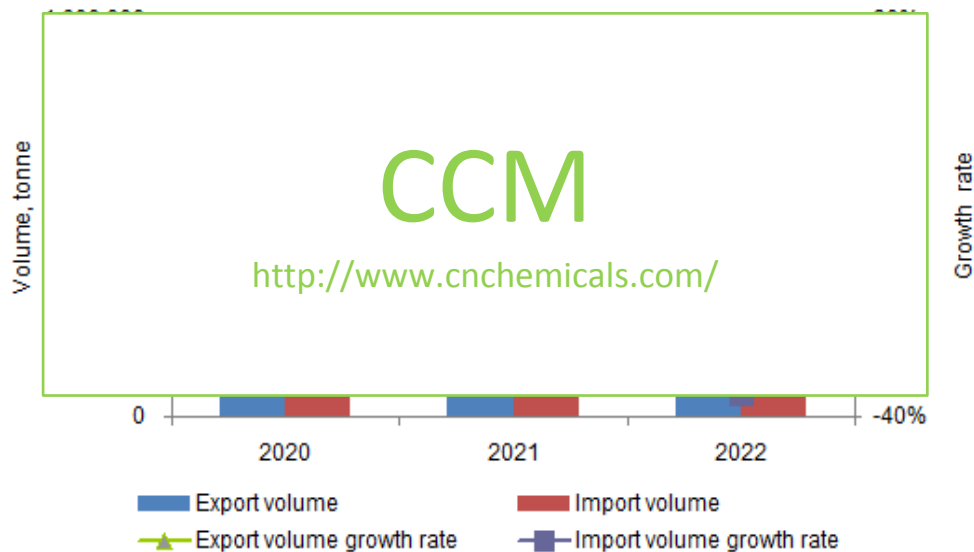
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### 5 Import and export analysis

#### 5.1 Overview 2020–2022

...

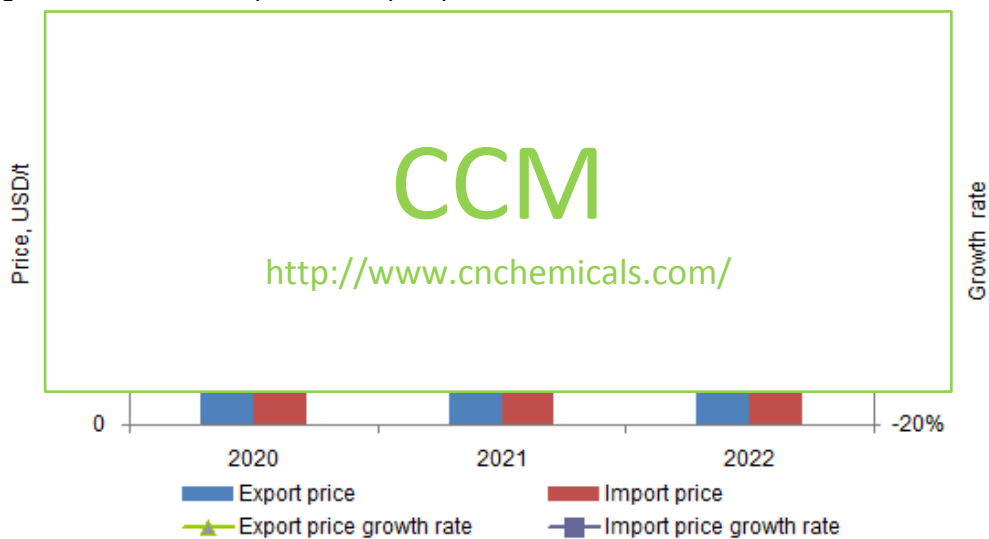
Figure 5.1-1 China's import and export volume of titanium dioxide, 2020–2022



Source: CCM & China Customs

...

Figure 5.1-2 China's import and export prices of titanium dioxide, 2020–2022

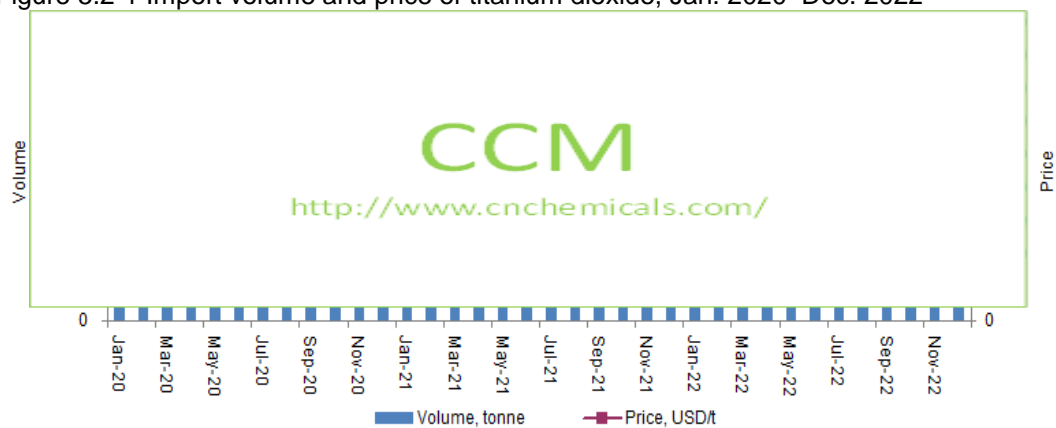


Source: CCM & China Customs

## 5.2 Import analysis 2020–2022

...

Figure 5.2-1 Import volume and price of titanium dioxide, Jan. 2020–Dec. 2022



Source: CCM & China Customs



### 5.3 Export analysis 2020–2022

...

Table 5.3-1 China's top 10 export destinations of titanium dioxide, 2020–2022

| No.                  | Country | 2022            |              | Country              | 2021            |              | Country              | 2020            |              |
|----------------------|---------|-----------------|--------------|----------------------|-----------------|--------------|----------------------|-----------------|--------------|
|                      |         | Quantity, tonne | Price, USD/t |                      | Quantity, tonne | Price, USD/t |                      | Quantity, tonne | Price, USD/t |
| 1                    | India   | XXX             | XXX          | India                | XXX             | XXX          | India                | XXX             | XXX          |
| 2                    | Brazil  | XXX             | XXX          | Brazil               | XXX             | XXX          | Brazil               | XXX             | XXX          |
| 3                    | ...     | XXX             | XXX          | ...                  | XXX             | XXX          | ...                  | XXX             | XXX          |
| 4                    | ...     | XXX             | XXX          | ...                  | XXX             | XXX          | ...                  | XXX             | XXX          |
| 10                   | ...     | XXX             | XXX          | ...                  | XXX             | XXX          | ...                  | XXX             | XXX          |
| <b>Others</b>        |         | XXX             | XXX          | <b>Others</b>        | XXX             | XXX          | <b>Others</b>        | XXX             | XXX          |
| <b>Total/Average</b> |         | XXX             | XXX          | <b>Total/Average</b> | XXX             | XXX          | <b>Total/Average</b> | XXX             | XXX          |

Source: CCM & China Customs

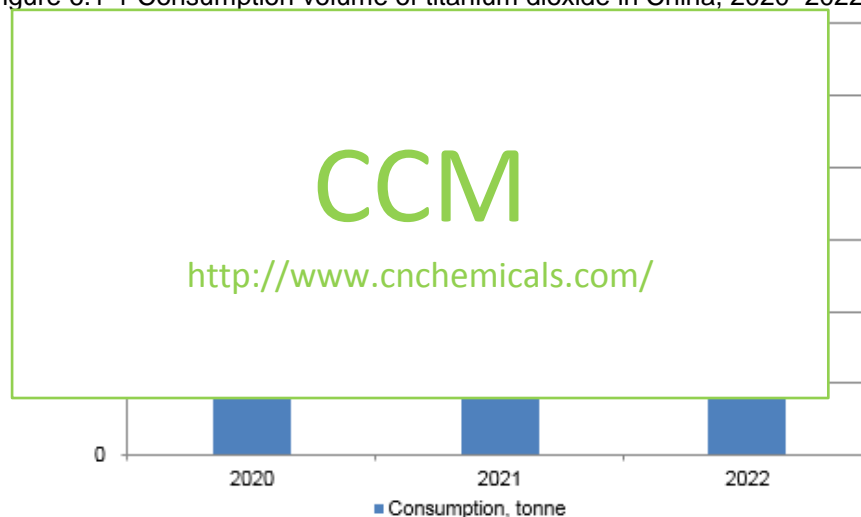
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### 6.1 Titanium dioxide consumption in China, 2020–2022

China, as an industrial power, is not only a powerhouse for TiO<sub>2</sub> production, but also a big consumer of TiO<sub>2</sub>. In 2020–2022, annual domestic TiO<sub>2</sub> consumption was XXX tonnes, XXX tonnes and XXX tonnes, respectively.

Top four downstream application fields of TiO<sub>2</sub> (by TiO<sub>2</sub> consumption) are coating, plastics, papermaking and chemical fibre in China. In 2022, coating industry contributed to nearly XXX of China's total TiO<sub>2</sub> consumption, followed by plastics with XXX and papermaking with XXX.

Figure 6.1-1 Consumption volume of titanium dioxide in China, 2020–2022



Source: CCM

Table 6.1-1 Consumption volume of titanium dioxide by major end use segment in China, 2020–2022

| Industry     | Consumption volume, tonne |            |            |
|--------------|---------------------------|------------|------------|
|              | 2022                      | 2021       | 2020       |
| Coating      | XXX                       | XXX        | XXX        |
| Plastics     | XXX                       | XXX        | XXX        |
| XXX          | XXX                       | XXX        | XXX        |
| ...          | XXX                       | XXX        | XXX        |
| Others       | XXX                       | XXX        | XXX        |
| <b>Total</b> | <b>XXX</b>                | <b>XXX</b> | <b>XXX</b> |

Source: CCM

...

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