

# **Survey of Titanium Dioxide in China** The Eleventh Edition December 2022

Researched & Prepared by:

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## 1. Introduction

Survey of Titanium Dioxide in China, finished in December 2022, is CCM's eleventh edition report on titanium dioxide industry. This intelligent report attaches importance to the following parts:

- ✓ Titanium dioxide production in China, 2019–2021
- ✓ Titanium dioxide and raw material prices in China, 2019–H1 2022
- ✓ Import and export analysis, 2019–2021
- ✓ Titanium dioxide consumption situation in China, 2019–2021

# 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  $(TiO_2)$  industry has been developing steadily. The period of 2019–2021 saw consecutive growth of  $TiO_2$  capacity and output. In 2021, domestic  $TiO_2$  capacity grew to XXX million t/a and the output came to nearly XXX million tonnes. With increasing concentration of the industry and manufacturers to obtain better production technology, it is estimated that  $TiO_2$  production capacity in China will exceed XXX million t/a by 2026 and the output will grow to about XXX million tonnes.

So far, chloride process  $TiO_2$  is at the nascent stage in China, while sulfate 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  $TiO_2$  production techniques still has a long way to go.

The domestic price curve of  $TiO_2$  in 2019–H1 2022 showed a XXX pattern; the price XXX from Jan. 2019 to July 2020, then XXX all the way to June 2021, and after that fluctuated at high level till June 2022.

With high foreign demand and the continuous improvement in quality of domestic  $TiO_2$ , the exports kept strong in 2019–2021, and China exported XXX tonnes of  $TiO_2$  in 2021, the volume expanding at a CAGR of XXX during 2019–2021. The import volume of  $TiO_2$  to China also followed an uptrend in the same period, coming to XXX tonnes in 2021.

As one of the largest  $TiO_2$  consumers worldwide, China sees its consumption grow year by year. In 2019–2021, domestic  $TiO_2$  consumption increased from XXX tonnes to XXX tonnes, with a CAGR of XXX. Coating, plastics and papermaking industries remain the largest downstream markets for  $TiO_2$ , accounting for XXX, XXX and XXX of the total in 2021. It is expected that in the next five years, these three industries will continue to lead the way in  $TiO_2$  consumption.

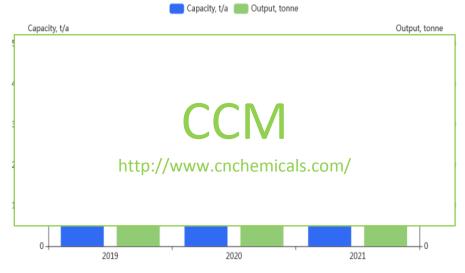
# 4. What is in the report?

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

# 1.1 Titanium dioxide production, 2019-2021

The period of 2019–2021 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, 2019–2021



Source: CCM

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## 1.2 Top 40 titanium dioxide manufacturers, 2019-2021

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In 2021, of all the domestic full-process  $TiO_2$  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  $TiO_2$  producer LB Group produced XXX tonnes of  $TiO_2$ .

Table 1.2-1 Titanium dioxide production of top active 40 manufacturers in China, 2019–2021

	Producer	Location	С	apacity, t/a	a	Output, tonne		
No.			2021	2020	2019	2021	2020	2019
1	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

Source: CCM

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Figure 1.2-1 Share of capacity of titanium dioxide by process in China, 2021



Source: CCM

Figure 1.2-2 Share of output of titanium dioxide by process in China, 2021



Source: CCM

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# 2.1 Raw material price, 2019-H1 2022

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Figure 2.1-1 Monthly ex-works price of ilmenite in China by region, Jan. 2019–June 2022



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. 2019–June 2022



Figure 2.1-3 Monthly ex-works price of titanium slag (90%) in China by region, Jan. 2019–June 2022



Source: CCM

Figure 2.1-4 Ex-works prices of titanium slag (74%–76%) in China by region, Jan. 2019–June 2022



# 2.2 TiO<sub>2</sub> price, 2019-H1 2022

. . .

Figure 2.2-1 Monthly ex-works prices of rutile titanium dioxide in China by region, Jan. 2019–June 2022



Source: CCM

Figure 2.2-2 Monthly ex-works prices of anatase titanium dioxide in China by region, Jan. 2019–June 2022



## 3 Mainstream titanium dioxide manufacturer, 2019-2021

### 3.1 Overview

. . .

Table 3.1-1 List of domestic titanium dioxide producers with more than 100,000-tonne output, 2021

No.	Producers	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

. . .

# 5 Import and export analysis

### 5.1 Overview 2019-2021

. . .

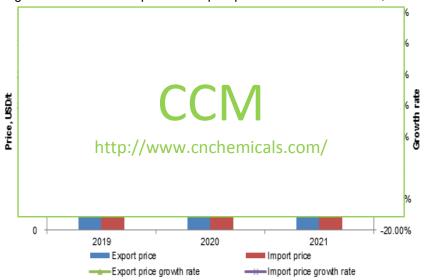
Figure 5.1-1 China's import and export volume of titanium dioxide, 2019–2021



Source: CCM & China Customs

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Figure 5.1-2 China's import and export prices of titanium dioxide, 2019–2021



Source: CCM & China Customs

# 5.2 Import analysis 2019-2021

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Figure 5.2-1 Import volume and price of titanium dioxide, Jan. 2019–Dec. 2021



Source: CCM & China Customs

# 5.3 Export analysis 2019-2021

• • •

Table 5.3-1 China's export destinations of titanium dioxide, 2019–2021

	Country	2021			20	)20		2019	
No.		Quantity, tonne	Country	Country	Country	Quantity, tonne	Country	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
C	Others	XXX	XXX	Others	XXX	XXX	Others	XXX	XXX
Tota	I/Average	XXX	XXX	Total/Average	XXX	XXX	Total/Average	XXX	XXX

Source: CCM & China Customs

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### 6.1 Chinese titanium dioxide consumption situation

China, as an industrial power, is not only a producing powerhouse, but also a big consumer of TiO<sub>2</sub>. In 2019–2021, annual domestic consumption of titanium dioxide were XXX tonnes, XXX tonnes and XXX tonnes respectively, increasing with a CAGR of XXX.

Downstream application fields of  $TiO_2$  are mainly coating, plastics, papermaking and chemical fiber, occupying the top four positions in China's  $TiO_2$  consumption fields. In 2021, XXX of China's  $TiO_2$  was used in coating, followed by plastics and papermaking, accounting for XXX and XXX of the total respectively.

Figure 6.1-1 Consumption volume of titanium dioxide in China, 2019–2021



Table 6.1-1 Consumption volume of titanium dioxide by major end use segment in China, 2019-2021

la disatur.	Consumption volume, tonne						
Industry	2019	2020	2021				
Coating	xxx	XXX	XXX				
Plastics	xxx	XXX	XXX				
XXX	xxx	XXX	XXX				
	xxx	XXX	XXX				
Others	xxx	XXX	XXX				
Total	xxx	XXX	xxx				

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