

# **2,4-D Survey in China**

**The Eighth Edition**

**March 2022**

**Researched & Prepared by:**

**Kcomber Inc.**

**Copyright by Kcomber Inc.**

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

## Contents

<b>Executive summary</b> .....	<b>1</b>
<b>Scope and methodology</b> .....	<b>2</b>
<b>1 Brief introduction to 2,4-D in China</b> .....	<b>4</b>
<b>2 Production of 2,4-D in China</b> .....	<b>7</b>
2.1 Technology .....	7
2.2 Key raw materials.....	8
2.3 Registration.....	9
2.4 Capacity and output, 2016–2021 .....	12
2.5 Key producers .....	13
<b>3 Price &amp; exports of 2,4-D in China</b> .....	<b>15</b>
3.1 Price.....	15
3.2 Exports.....	16
3.3.1 Exports, H1 2021 .....	16
3.3.2 Export status in 2020 .....	23
3.3.2 Export status in 2020 .....	27
3.3.2 Export status in 2020 .....	36
3.3.2 Export status in 2020 .....	41
<b>4 Consumption of 2,4-D in China, 2019–2021</b> .....	<b>45</b>
4.1 Consumption overview, 2019–2021 .....	45
4.2 Share by crop, 2021E .....	45
4.3 Share by region, 2021E.....	46
<b>5 Forecast on 2,4-D industry in China, 2022–2026</b> .....	<b>48</b>
5.1 Key influencing factors .....	48
5.2 Forecast on supply and demand .....	48
<b>6 Conclusion</b> .....	<b>50</b>

### LIST OF TABLES

Table 1-1 China's imports and exports of pesticides and herbicides, 2017–2020
Table 1-2 Domestic output and consumption of 2,4-D technical and related shares in herbicides, 2013–2020
Table 2.3-1 Valid registrations of 2,4-D in China, as of Dec. 2021
Table 2.3-2 Valid registration of 2,4-D technical in China, as of Jan. 2022
Table 2.5-1 Production of major 2,4-D technical producers in China, 2016–2021
Table 3.2.1-1 Monthly exports of 2,4-D technical and formulations in China, H1 2021
Table 3.2.1-2 Export volume of 2,4-D technical and formulations from China by destination in H1 2021, tonne
Table 3.2.1-3 Export volume of 2,4-D technical and formulations from China by exporter in H1 2021, tonne

Table 3.2.1-4 Export volume of 2,4-D technical and formulations from China by producer in H1 2021, tonne  
Table 3.2.2-1 Monthly exports of 2,4-D technical and formulations in China, 2020  
Table 3.2.2-2 Export volume of 2,4-D technical and formulations from China by destination in 2020, tonne  
Table 3.2.2-3 Export volume of 2,4-D technical and formulations from China by exporter in 2020, tonne  
Table 3.2.2-4 Export volume of 2,4-D technical and formulations from China by producer in 2020, tonne  
Table 3.2.3-1 Monthly exports of 2,4-D technical and formulations in China, 2019  
Table 3.2.3-2 Export volume of 2,4-D technical and formulations from China by destination in 2019, tonne  
Table 3.2.3-3 Export volume of 2,4-D technical and formulations from China by exporter in 2019, tonne  
Table 3.2.3-4 Export volume of 2,4-D technical and formulations from China by producer in 2019, tonne  
Table 3.2.4-1 Monthly exports of 2,4-D technical and formulations in China, 2018  
Table 3.2.4-2 Export volume of 2,4-D technical and formulations from China by destination in 2018, tonne  
Table 3.2.4-3 Export volume of 2,4-D technical and formulations from China by exporter in 2018, tonne  
Table 3.2.4-4 Export volume of 2,4-D technical and formulations from China by producer in 2018, tonne  
Table 3.2.5-1 Monthly exports of 2,4-D technical and formulations in China, 2017  
Table 3.2.5-2 Export volume of 2,4-D technical and formulations from China by destination in 2017, tonne  
Table 3.2.5-3 Export volume of 2,4-D technical and formulations from China by exporter in 2017, tonne  
Table 3.2.5-4 Export volume of 2,4-D technical and formulations from China by producer in 2017, tonne  
Table 3.2.6-1 Monthly exports of 2,4-D technical and formulations in China, 2016  
Table 3.2.6-2 Export volume of 2,4-D technical and formulations from China by destination in 2016, tonne  
Table 3.2.6-3 Export volume of 2,4-D technical and formulations from China by exporter in 2016, tonne  
Table 3.2.6-4 Export volume of 2,4-D technical and formulations from China by producer in 2016, tonne  
Table 4.1-1 Production, export, import and apparent consumption of 2,4-D in China, 2019–2021

## LIST OF FIGURES

Figure 1-1 Output and share of herbicides in China's pesticide industry, 2016–2020  
Figure 2.4-1 Capacity and output of 2,4-D technical in China, 2016–2021  
Figure 3.1-1 Annual ex-works price of 96% 2,4-D technical in China, 2013–2020  
Figure 3.1-2 Monthly ex-works price of 96% 2,4-D technical in China, Jan. 2020–Dec. 2021  
Figure 3.2-1 Annual export price of main specifications of 2,4-D technical and formulations in China, 2016–H1 2021  
Figure 3.2-2 Annual export volume of 2,4-D technical and formulations in China, 2016–2020  
Figure 4.1-1 Actual consumption volume of 2,4-D (converted into 100% technical) in China, 2019–2021  
Figure 4.2-1 Consumption of 2,4-D formulations (converted into 100% technical) by crop in China, 2021E  
Figure 4.3-1 Consumption of 2,4-D formulations (calculated by 100% technical) in China by region, 2021E  
Figure 5.2-1 Forecast on supply of 2,4-D technical (calculated by 100% technical) in China, 2022–2026  
Figure 5.2-2 Forecast on demand for 2,4-D formulations (calculated by 100% technical) in China, 2022–2026

## 1. Introduction

2,4-D products, with a history of production and application exceeding 30 years in China, enjoy a stable market demand. Farmers prefer to use 2,4-D as a herbicide in wheat-, corn- and rice-growing fields or as a plant growth regulator applied on eggplant, tomato, pumpkin, watermelon and etc.

China's 2,4-D output was recorded a year-on-year decline in 2021. Since late Jan., production of 2,4-D butylate products has been banned in domestic market. In Q4, short-term power shortage became serious in China, especially in Jiangsu Province and Zhejiang Province. Meanwhile, the market price of 2,4-D was pushed up, mainly because of the higher cost of key raw materials. However, China still maintained a quite stable supply of 2,4-D technical for markets home and abroad basically this year.

Considering escalating geopolitical tensions of the East Europe, a price hike of basic raw materials, the price of 2,4-D will continue to rise in the near future.

In this report, CCM will do 2,4-D Survey in China 2020 from the following aspects:

- ✓ Production of 2,4-D
- ✓ Price & exports
- ✓ Consumption
- ✓ Forecast on 2,4-D industry in China

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

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

## 2. Scope and methodology

This report aims to demonstrate the development of 2,4-D industry in China and analyse the factors behind it. There are almost complete records and comments about technology, production, price, exports and consumption of this product in the report.

Region: China

Time scope: 2016–2021

### Methodology

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 the compilation and analysis of the obtained information. When necessary, checks have been made with Chinese suppliers regarding market information such as key producers, key end users, production and demand.

#### 2. Telephone interview

CCM has carried out extensive telephone interviews in order to survey the actual market situation of 2,4-D industry in China.

Interviewees cover:

- Key producers
- Key traders
- Associations
- Experts

#### 3. Network research

CCM adopted network to contact with players in the industry through B2B websites and software. CCM also obtained registration information via network.

### Data processing and presentation

The data collected and compiled are sourced from:

- CCM's database
- Published articles from periodicals, magazines and journals, and third-party databases
- Statistics from governments and international institutes
- Telephone interviews with domestic producers, service suppliers, governments, etc.
- Third-party data providers
- Customs statistics
- Comments from industrial experts
- Professional databases from other sources
- 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 took place in order to analyse the data and draw conclusions from them.

### Unit

USD: currency unit in the US

RMB: currency unit in China, also called Yuan

Tonne: ton, equal to metric ton in this report

t/a: tonne/annual or tonne/year

/t: per tonne

**Table 1 Abbreviations and full names**

<b>Abbreviation</b>	<b>Full name</b>
AS	Aqueous solution
TC	Technical material
TK	Technical concentrate
EC	Emulsifiable concentrate
ICAMA	Institute for the Control of Agrochemicals, Ministry of Agriculture and Rural Affairs

Source: CCM

**Table 2 USD/CNY exchange rate, Jan. 2013–Dec. 2021**

<b>Year</b>	<b>Jan.</b>	<b>Feb.</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>Aug.</b>	<b>Sept.</b>	<b>Oct.</b>	<b>Nov.</b>	<b>Dec.</b>	<b>Average</b>
2013	6.2787	6.2842	6.2743	6.2471	6.1970	6.1718	6.1725	6.1708	6.1588	6.1393	6.1372	6.1160	<b>6.1920</b>
2014	6.1043	6.1128	6.1358	6.1553	6.1636	6.1557	6.1569	6.1606	6.1528	6.1441	6.1432	6.1238	<b>6.1428</b>
2015	6.1272	6.1339	6.1507	6.1302	6.1143	6.1161	6.1167	6.3056	6.3691	6.3486	6.3666	6.4476	<b>6.2288</b>
2016	6.5527	6.5311	6.5064	6.4762	6.5315	6.5874	6.6774	6.6474	6.6715	6.7442	6.8375	6.9182	<b>6.6425</b>
2017	6.8918	6.8713	6.8932	6.8845	6.8827	6.8019	6.7772	6.7148	6.5909	6.6493	6.6300	6.6067	<b>6.7662</b>
2018	6.5079	6.3045	6.3352	6.2764	6.3670	6.4078	6.6157	6.8293	6.8347	6.8957	6.9670	6.9431	<b>6.6070</b>
2019	6.8482	6.7081	6.6957	6.7193	6.7344	6.8896	6.8716	6.8938	7.0883	7.0726	7.0437	7.0262	<b>6.8826</b>
2020	6.9614	6.9249	6.9811	7.0771	7.0690	7.1315	7.0710	6.9980	6.8498	6.7796	6.7050	6.5921	<b>6.9284</b>
2021	6.5408	6.4623	6.4754	6.5584	6.4895	6.3572	6.4709	6.4660	6.4680	6.4604	6.4192	6.3693	<b>6.4615</b>

Source: The People's Bank of China

### 3. Executive summary

2,4-D products, with a history of production and application exceeding XX years in China, enjoy a stable market demand. Farmers prefer to use 2,4-D as a herbicide in wheat-, corn- and rice-growing fields or as a plant growth regulator applied on eggplant, tomato, pumpkin, watermelon and etc. But production of 2,4-D XX products has been banned in domestic market since late Jan. 2021.

In 2021, China 2,4-D capacity remained at XXXX t/a and the output (converted to technical 100%) was some XXX tonnes. The ex-works price of 2,4-D technical saw significant uptrend this year due to increased cost of key raw materials.

Most 2,4-D products, including XX 2,4-D technical, XX 2,4-D technical, 2,4-D amine salt XX g/L SL and 2,4-D amine salt XX g/L SL, are for export. 2,4-D XX EC is mainly consumed in the domestic market, yet 2,4-D XX products are to be withdrawn from Chinese market after Jan. 2023. It is believed that 2,4-D still enjoys a promising prospect in China. Demand for 2,4-D will keep stable from home and abroad and demand for 2,4-D XX would be replaced by other products, such as 2,4-D-XX.

#### 4. What's in this report

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

##### 1 Brief introduction to 2,4-D in China

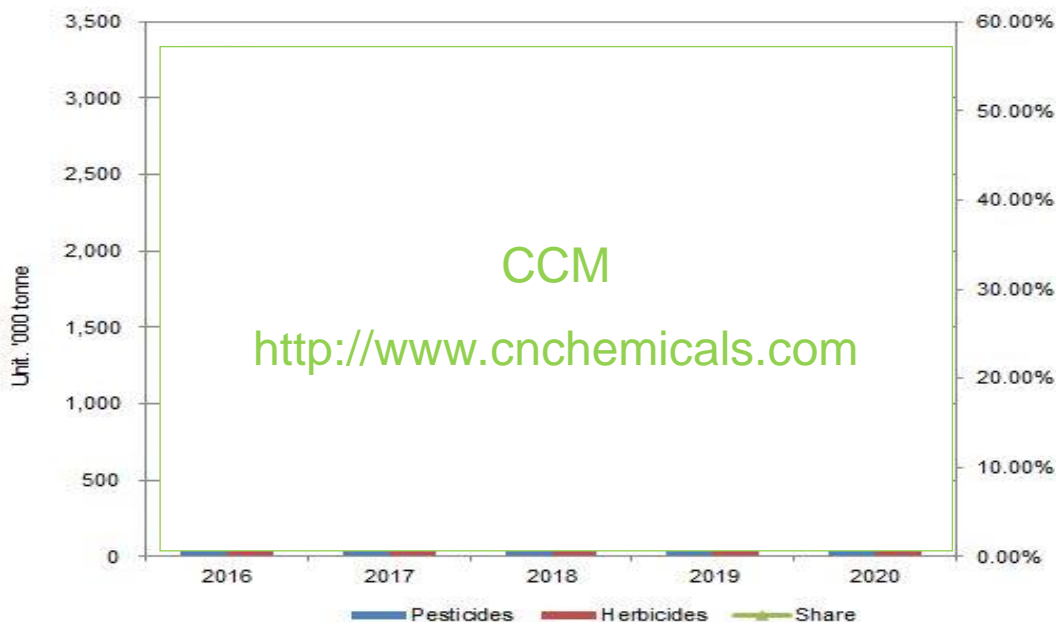
##### - Brief introduction to herbicide industry

China is now the world's largest exporter of pesticides, and herbicides is an important pesticide category. In recent years, amid the rising labor cost and the pursuit of higher efficiency and cost-effectiveness, herbicides have been widely used in agricultural production. However, the abuse of herbicides can easily lead to destruction of ecological environment and soil fertility. Therefore, with multiple environmental protection policies rolled out, the output of herbicides in China showed a general downward trend in recent years. In 2020, China's herbicide output was XXXX tonnes (converted to 100% technical, the same hereinafter), decreasing by XX year on year.

In terms of export of pesticides from China, in 2020, altogether XX tonnes of pesticides were exported at a total value of XX million. Specifically, XX tonnes of herbicides were exported at a total value of XX million, up by XX and XX year on year, respectively. However, the export volume of herbicides took up less than XX of the total export volume this year, down from over XX in 2019.

...

Figure 1-1 Output and share of herbicides in China's pesticide industry, 2016–2020



*Note: All the volumes are calculated by 100% technical.*

*Source: National Bureau of Statistics of China*



## - Position of 2,4-D in herbicide industry

Table 1-2 Domestic output and consumption of 2,4-D technical and related shares in herbicides, 2013–2020

Year	Output, tonne		Output share	Consumption, tonne		Consumption share
	Herbicides (100% technical)	2,4-D (100% technical)		Herbicides (100% technical)	2,4-D (100% technical)	
2013	XXX	XXX	XXX	XXX	XXX	XXX
2014	XXX	XXX	XXX	XXX	XXX	XXX
...	...	...	...	...	...	...
2020	XXX	XXX	XXX	XXX	XXX	XXX

Source: CCM

## 2 Production of 2,4-D in China

### 2.1 Technology

...

### 2.2 Key raw materials

...

### 2.3 Registration

As of Dec. 2021, the number of registered 2,4-D products reached XX.

Table 2.3-1 Valid registrations of 2,4-D in China, as of Dec. 2021

Specification		Number of registrations
Single formulations	EC	XXX
	AS	XXX
	Others	XXX
Mixed formulations		XXX
Technical	2,4-D	XXX
	2,4-D-ethylhexyl	XXX
	2,4-D butylate	XXX
	2,4-D Na	XXX
	2,4-DB	XXX
<b>Total</b>		XXX

Source: Institute for the Control of Agrochemicals, Ministry of Agriculture (ICAMA)

Table 2.3-2 Valid registration of 2,4-D technical in China, as of Jan. 2022

No.	Registration Code	Company (CN)	Company	Active ingredients	Content	Expiry Date
1	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	XXX	XXX	XXX	XXX	XXX
...	...	...	...	...	...	...
50	XXX	XXX	XXX	XXX	XXX	XXX

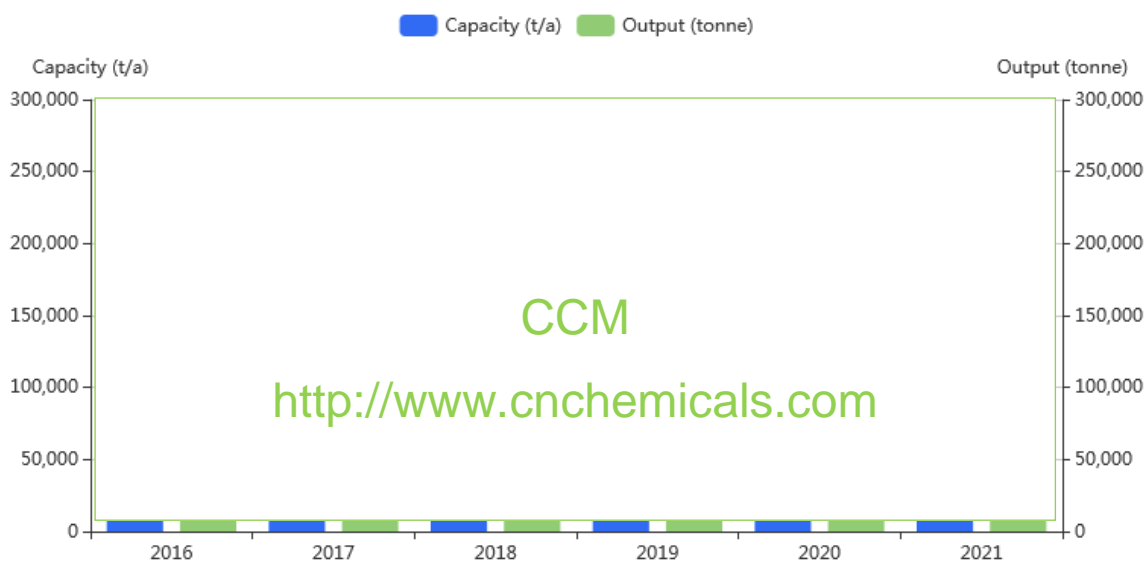
Source: ICAMA

## 2.4 Capacity and output, 2016–2021

The capacity of 2,4-D grew rapidly from XXX t/a in 2018 to XXX t/a in 2019, up by XXX. It XXX in 2020 and 2021.

...

Figure 2.4-1 Capacity and output of 2,4-D technical in China, 2016–2021



Note: All the volumes of output are calculated by 100% technical.

Source: CCM

## 2.5 Key producers

At present, most 2,4-D technical producers in China are still located in XX Province even though it has been under great pressures of environmental protection in recent years. XX has always been a crucial domestic pesticide production base and has advantages on abundant raw material supply, convenient transportation and large consumption.

Picture 2.5-1 Capacity distribution of top six 2,4-D technical manufacturers in China by region, 2021



Source: CCM

...

Table 2.5-1 Production of major 2,4-D technical producers in China, 2016–2021

No.	Producer	Location	Status, as of Dec. 2021	Capacity, t/a						Output, tonne					
				2021	2020	2019	2018	2017	2016	2021	2020	2019	2018	2017	2016
1	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
3	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
4	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
...															

Source: CCM

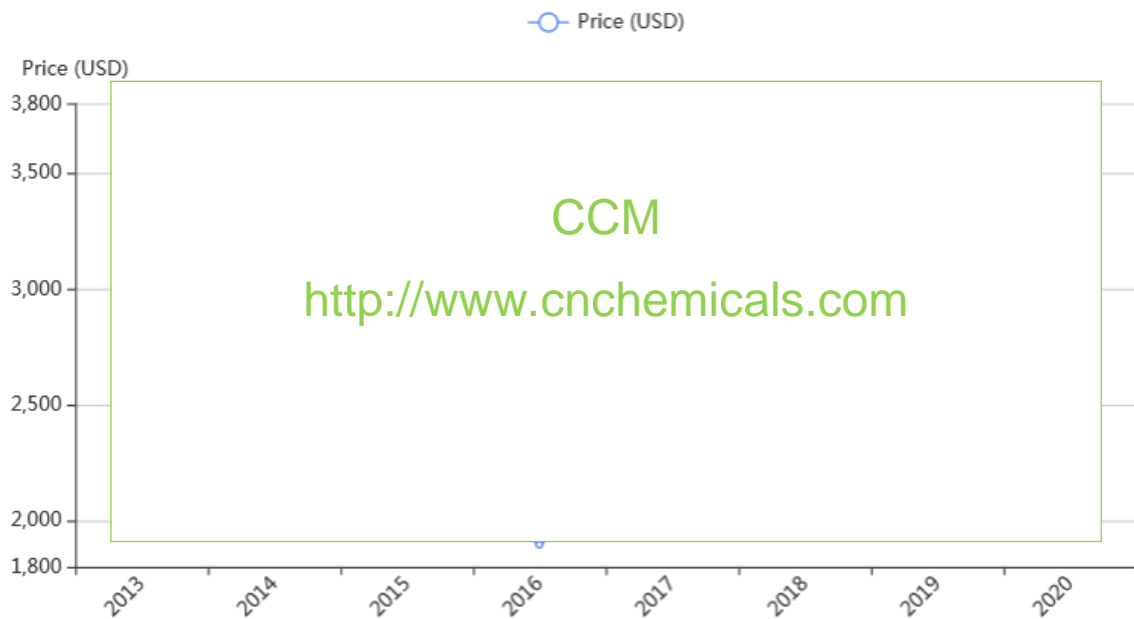
### 3 Price & exports of 2,4-D in China

#### 3.1 Price

In 2021, the ex-works price of 2,4-D technical rose continuously, hitting XXX/t in Dec. 2021, up by XX compared with the 2020 annual average.

...

Figure 3.1-1 Annual ex-works price of 96% 2,4-D technical in China, 2013–2020



Source: CCM

Figure 3.1-2 Monthly ex-works price of 96% 2,4-D technical in China, Jan. 2020–Dec. 2021



Source: CCM

### 3.2 Exports

Thanks to easing global XX, China's domestic economy has continued to recover. Chinese pesticide suppliers answer to about XX of global demand. And the pandemic has directed more overseas orders to China. In 2021, China maintained XX in its domestic economy and the pesticide production XX steadily.

In H1 2021, export prices of China's 2,4-D technical and formulation products saw significant year-on-year XX; average export prices of the main formulations—2,4-D XX and 2,4-D XX—were XXX/t and XXX/t, respectively, witnessing double-digit XXX over the 2020 averages. Regarding XX

2,4-D technical, the average export price was XXX/t in 2021, increased by XXX compared with the average in 2016–2020.

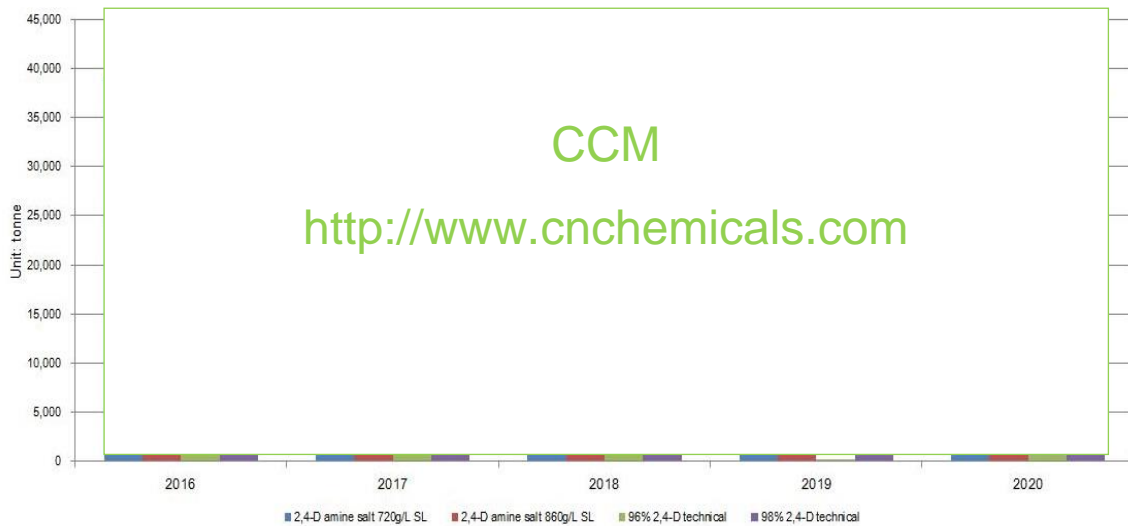
Figure 3.2-1 Annual export price of main specifications of 2,4-D technical and formulations in China, 2016–H1 2021



Source: Tranalysis

**- Exports of 2,4-D**

Figure 3.2-2 Annual export volume of 2,4-D technical and formulations in China, 2016–2020



Source: Tranalysis

### 3.2.1 Exports, H1 2021

Table 3.2-1 Monthly exports of 2,4-D technical and formulations in China, H1 2021

Month	2,4-D amine salt 600g/L SL		2,4-D amine salt 720g/L SL		2,4-D amine salt 80% SG		2,4-D amine salt 860g/L SL		2,4-D amine salt 96% SG		95% 2,4-D technical		96% 2,4-D technical		98% 2,4-D technical		Value, million USD
	Volume, tonne	Price, USD/kg	Volume, tonne	Price, USD/kg	Volume, tonne	Price, USD/kg	Volume, tonne	Price, USD/kg	Volume, tonne	Price, USD/kg	Volume, tonne	Price, USD/kg	Volume, tonne	Price, USD/kg	Volume, tonne	Price, USD/kg	
Jan.	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Feb.	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
March	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
April	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
May	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
June	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
<b>Total/Ave</b>	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Source: Tranalysis...

Table 3.2.1-2 Export volume of 2,4-D technical and formulations from China by destination in H1 2021, tonne

No.	Country	2,4-D amine salt 600g/L SL	2,4-D amine salt 720g/L SL	2,4-D amine salt 80% SG	2,4-D amine salt 860g/L SL	2,4-D amine salt 96% SG	304g/L SL	95% 2,4-D TC	98% 2,4-D TC	Total
1	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
3	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
...										

Source: Tranalysis...

Table 3.2.1-3 Export volume of 2,4-D technical and formulations from China by exporter in H1 2021, tonne

No.	Exporter	2,4-D amine salt 600g/L SL	2,4-D amine salt 720g/L SL	2,4-D amine salt 80% SG	2,4-D amine salt 860g/L SL	2,4-D amine salt 96% SG	304g/L SL	95% 2,4-D TC	98% 2,4-D TC	Total
1	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
3	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
...										

Source: Tranalysis

Table 3.2.1-4 Export volume of 2,4-D technical and formulations from China by producer in H1 2021, tonne

No.	Producer	2,4-D amine salt 600g/L SL	2,4-D amine salt 720g/L SL	2,4-D amine salt 80% SG	2,4-D amine salt 860g/L SL	2,4-D amine salt 96% SG	304g/L SL	95% 2,4-D TC	98% 2,4-D TC	Total
1	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
3	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
...										

Source: Tranalysis

### 3.2.2 ~3.2.6 Export status in 2016-2020

...



## 4 Consumption of 2,4-D in China, 2019–2021

### 4.1 Consumption overview, 2019–2021

...

### 4.2 Share by crop, 2021

Figure 4.2-1 Consumption of 2,4-D formulations (converted into 100% technical) by crop in China, 2021E



Source: CCM

### 4.3 Share by region, 2021

Figure 4.3-1 Consumption of 2,4-D formulations (calculated by 100% technical) in China by region, 2021E



Source: CCM

## 5 Forecast on 2,4-D industry in China, 2021–2025

### 5.1 Key influencing factors

...

## 5.2 Forecast on supply and demand

...

## 6 Conclusion

...

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

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

Email: [econtact@cnchemicals.com](mailto:econtact@cnchemicals.com)