

2,4-D Survey in China

The Ninth Edition

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Researched & Prepared by:

Kcomber Inc.

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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, 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, the 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 at home and abroad basically this year.

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

In this report, CCM will do 2,4-D Survey in China for 2022 from the following aspects:

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

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2. Scope and methodology

This report aims to demonstrate the development of 2,4-D industry in China and analyses 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: 2017–2022

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

Abbreviation	Full name
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. 2016–Sept. 2022

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
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	6.6425
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	6.7662
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	6.6070
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	6.8826
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	6.9284
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	6.4615
2022	6.3794	6.3580	6.3014	6.3509	6.5672	6.6651	6.6863	6.7467	6.8821	-	-	-	6.5486

Source: The People's Bank of China

3. Executive summary

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, etc. However, the production of XXXX products has been banned in China since late Jan. 2021.

In 2022, China's 2,4-D capacity remained at XXXX t/a and the output (converted to technical 100%) increased to XXXX tonnes. The ex-works price of 2,4-D technical stayed at XXXX since the yearly uptrend in 2021, while in the long term the price may XXXX as the cost of key raw materials XXXX. Most 2,4-D products, including 96% 2,4-D technical, 98% 2,4-D technical, 2,4-D amine salt 720g/L SL and 2,4-D amine salt 860g/L SL, are for export; XXXX is mainly consumed in the domestic market. Although XXXX products are to be withdrawn from Chinese market from Jan. 2023, the replacements, such as XXXX, still allow 2,4-D to enjoy a promising prospect in China. It is estimated that demand for 2,4-D will keep XXXX at home and abroad.

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 XXXX, China's herbicide output was XXXX tonnes (converted to 100% technical, the same hereinafter), decreasing by XX year on year.

In terms of export, in 2021 China exported XXXX tonnes of pesticides at a total value of USD XXXX million. Specifically, XXXX tonnes of herbicides were exported with a YoY increase of XXXX %, accounting for more than XXXX % of total pesticide exports (nearly XXXX percentage points higher than that of XXXX); the total value of herbicide exports was USD XXXX million, up by XXXX % YoY.

...

Figure 1-1 Output and share of herbicides in China's pesticide industry, 2016–2022E



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, 2019–2021

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)	
2019	XXX	XXX	XXX	XXX	XXX	XXX
2020	XXX	XXX	XXX	XXX	XXX	XXX
...
2021	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 Oct. 2022, the number of registered 2,4-D products reached XX.

Table 2.3-1 Valid registrations of 2,4-D in China, as of Oct. 2022

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
Total		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 Oct. 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

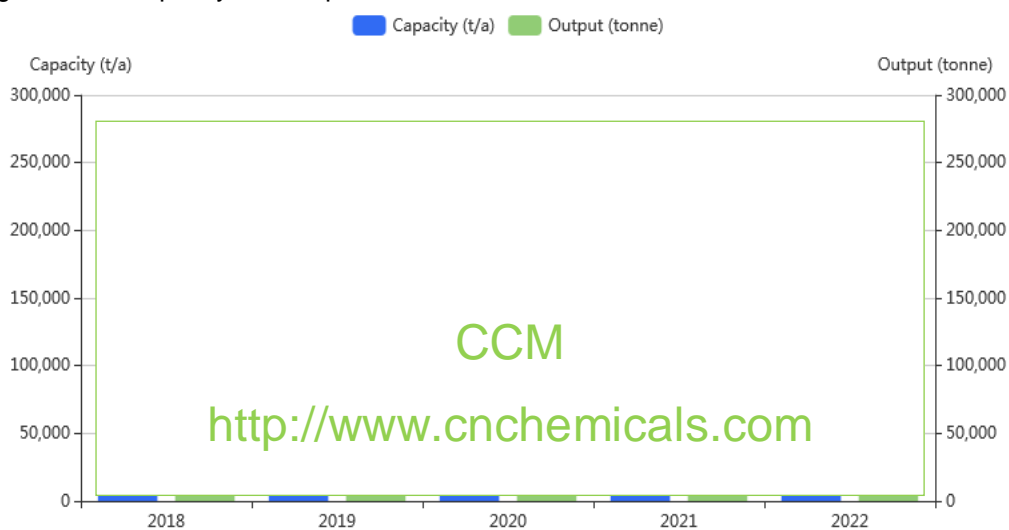
Source: ICAMA

2.4 Capacity and output, 2018–2022

In 2022, China has the 2,4-D production scale of about XXX t/a as much as last year.

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Figure 2.4-1 Capacity and output of 2,4-D technical in China, 2018–2022E



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, 2022



Source: CCM

...

Table 2.5-1 Production of major 2,4-D technical producers in China, 2018–2022

No.	Producer	Location	Status, as of Oct. 2022	Capacity, t/a					Output, tonne				
				2022	2021	2020	2019	2018	2022E	2021	2020	2019	2018
1	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
3	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
...													

Source: CCM

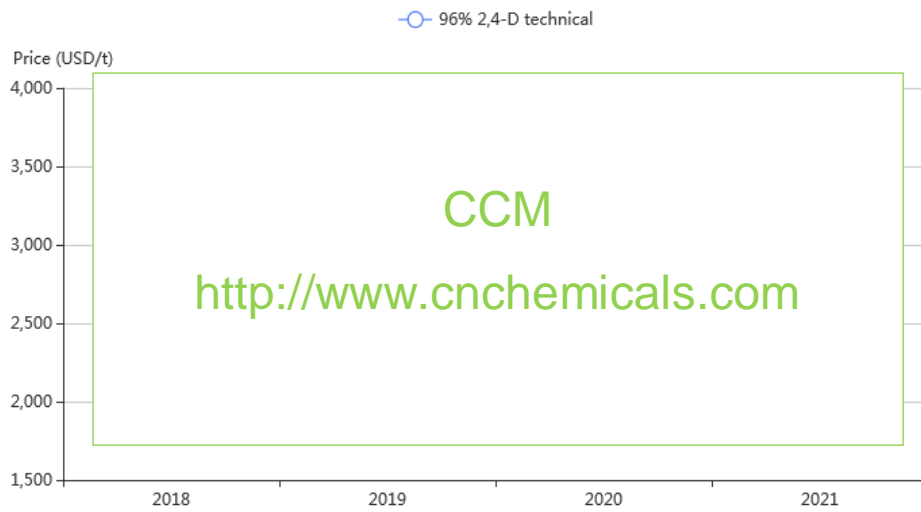
3 Price & exports of 2,4-D in China, 2020-H1 2022

3.1 Price

Entering 2022, as the policies impact eased, China's major manufacturers resumed the normal 2,4-D supply, which led to the XXX in monthly prices of H1; yet in the low season from XXX to XXX, with increasing demand abroad it hovered around USDXXX/t and is not expected to change much in XXX.

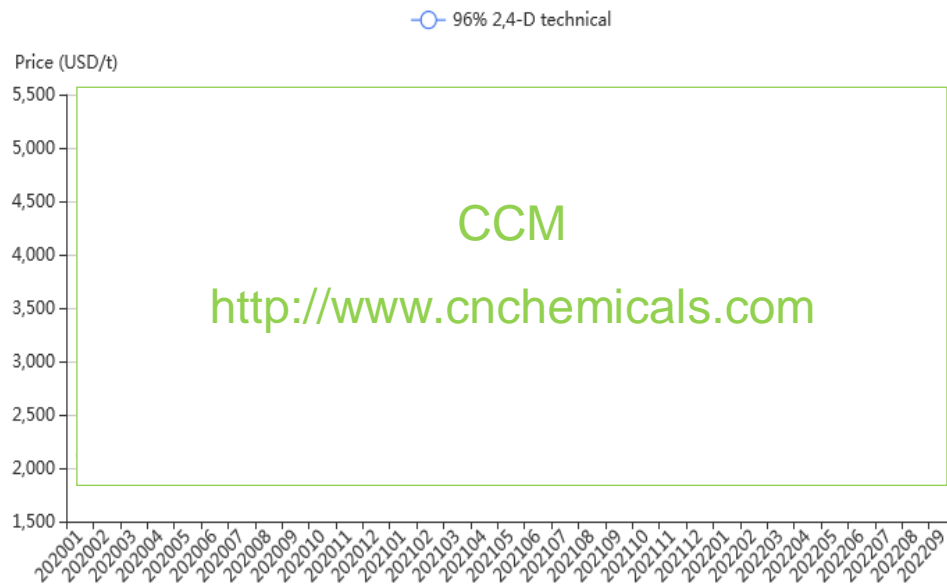
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Figure 3.1-1 Annual ex-works price of 96% 2,4-D technical in China, 2018–2021



Source: CCM

Figure 3.1-2 Monthly ex-works price of 96% 2,4-D technical in China, Jan. 2020–Sept. 2022



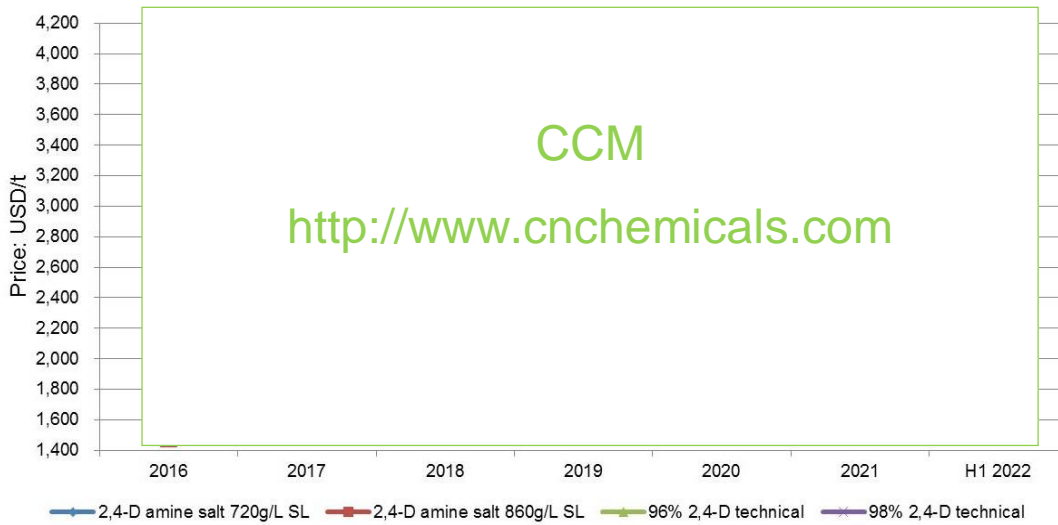
Source: CCM

3.2 Exports

...

Thanks to the easing XXXX, China's domestic economy has continued to recover since XXXX. China maintained stability in its domestic economy and pesticide production grew steadily in XXXX. Due to the XXXX demand and production caused by XXXX, export prices of all types of China's 2,4-D XXXX greatly in XXXX, and the prices of 2,4-D amine salt XXXX g/L SL, 2,4-D amine salt XXXX g/L SL experienced smaller shrinks.

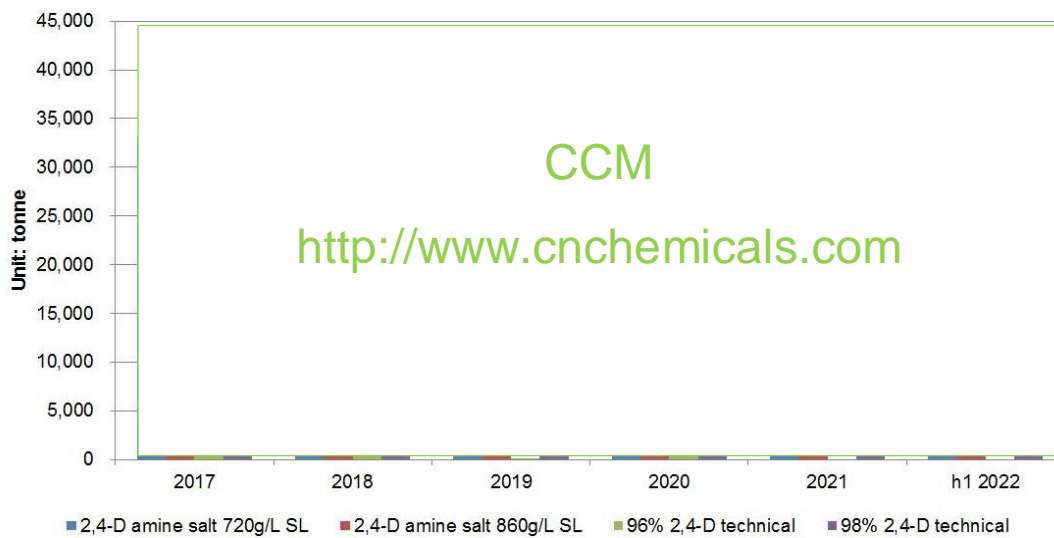
Figure 3.2-1 Annual export price of main specifications of 2,4-D technical and formulations in China, 2016–H1 2022



Source: Tranalysis

- Exports of 2,4-D

Figure 3.2-2 Annual export volume of 2,4-D technical and formulations in China, 2017–H1 2022



Source: Tranalysis

3.2.1 Details in 2020-H1 2022

-By months

Table 3.2-1 Monthly exports of 2,4-D technical and formulations in China, H1 2022

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	XXX
Feb.	XXX	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	XXX
April	XXX	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	XXX
June	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Total/Ave	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Source: Tranalysis...

...

-By destination

Table 3.2.1-4 Export volume of 2,4-D technical and formulations from China by destination in H1 2022, 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...

...

-By exporter

Table 3.2.1-7 Export volume of 2,4-D technical and formulations from China by exporter in H1 2022, 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

...

-By manufacturer

Table 3.2.1-10 Export volume of 2,4-D technical and formulations from China by producer in H1 2022, 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

...

4 Consumption of 2,4-D in China, 2019–2022

4.1 Consumption overview, 2019–2022

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4.2 Share by crop, 2022

Figure 4.2-1 Consumption of 2,4-D formulations (converted into 100% technical) by crop in China, 2022E



Note: Due to rounding, the total may not equal 100.00%.

Source: CCM

4.3 Share by region, 2022

Figure 4.3-1 Consumption of 2,4-D formulations (calculated by 100% technical) in China by region, 2022E



Source: CCM



5 Forecast on 2,4-D industry in China, 2023–2027

5.1 Key influencing factors

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5.2 Forecast on supply and demand

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6 Conclusions

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

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