

2,4-D Survey in China

The Fourth Edition

February 2018

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
Scope and methodology	2
1 Brief introduction to 2,4-D in China	4
2 Production of 2,4-D in China	6
2.1 Technology.....	6
2.2 Key raw materials.....	7
2.3 Registration.....	8
2.4 Capacity & output, 2012–2016.....	12
2.5 Key producers.....	13
3 Price & exports of 2,4-D, 2012-2016	16
3.1 Price.....	16
3.2 Exports	20
4 Consumption of 2,4-D in China, 2012-2016	35
4.1 Consumption overview, 2012-2016	35
4.2 Share by crops, 2016	36
4.3 Share by regions, 2016.....	37
5 Forecast on 2,4-D industry in China, 2017–2021	39
5.1 Key influencing factors.....	39
5.2 Forecast on supply and demand	39
6 Conclusion	41

LIST OF TABLES

Table 1-1 Domestic output and consumption of 2,4-D technical and related shares in herbicides, 2012–2016
Table 2.1-1 Unit consumption volume of main raw materials in two methods for synthesizing 2,4-D
Table 2.1-2 Consumption of energy in two methods for synthesizing 2,4-D
Table 2.3-1 Valid registrations of 2,4-D in China, as of 8 Nov., 2017
Table 2.3-2 Valid registration code of 2,4-D technical by company in China, as of 8 Nov., 2017
Table 2.5-1 Production of major 2,4-D technical producers in China, 2014–2016
Table 3.2-1 Monthly exports of 2,4-D technical and formulations in China, 2016
Table 3.2-2 Monthly exports of 2,4-D technical and formulations in China, 2015
Table 3.2-3 Monthly exports of 2,4-D technical and formulations in China, 2014
Table 3.2-4 Export volume of 2,4-D technical and formulations by destination in China, 2016
Table 3.2-5 Export volume of 2,4-D technical and formulations by destination in China, 2015
Table 3.2-6 Export volume of 2,4-D technical and formulations by destination in China, 2014
Table 3.2-7 Export volume of 2,4-D technical and formulations by exporter in China, 2016
Table 3.2-8 Export volume of 2,4-D technical and formulations by exporter in China, 2015
Table 3.2-9 Export volume of 2,4-D technical and formulations by exporter in China, 2014
Table 3.2-10 Export volume of 2,4-D technical and formulations by producer from China, 2016
Table 3.2-11 Export volume of 2,4-D technical and formulations by producer from China, 2015
Table 3.2-12 Export volume of 2,4-D technical and formulations by producer from China, 2014



Table 4.1-1 Production, export, import and apparent consumption of 2,4-D in China, 2012–2016

LIST OF FIGURES

- Figure 1-1 Output and share of herbicides in China's pesticide industry, 2007–2016
- Figure 2.1-1 The flowchart of the method of chlorination followed with condensation for synthesizing 2,4-D
- Figure 2.1-2 The flowchart of the method of condensation followed with chlorination for synthesizing 2,4-D
- Figure 2.2-1 Capacity and output of phenol in China, 2012–2016
- Figure 2.4-1 Capacity and output of 2,4-D technical in China, 2012–2016
- Figure 2.5-1 Distribution of 2,4-D technical output in China by regions, 2016
- Figure 3.1-1 Annual ex-works price of 96% 2,4-D technical in China, 2014–2016
- Figure 3.1-2 Quarterly ex-works price of 96% 2,4-D technical in China, 2014–2016
- Figure 3.1-3 Monthly ex-works price of 96% 2,4-D technical in China, 2014–2016
- Figure 3.1-4 Monthly ex-works price of 96% 2,4-D technical in China, Jan. 2014–Dec. 2016
- Figure 3.2-1 Annual export price of main specifications of 2,4-D technical and formulations in China, 2012–2016
- Figure 3.2-2 Annual export volume of 2,4-D technical and formulations in China, 2012–2016
- Figure 4.1-1 Actual consumption volume of 2,4-D in China, 2012–2016
- Figure 4.2-1 Consumption of 2,4-D formulations(converted into 96% technical) by crops in China, 2016
- Figure 4.3-1 Consumption of 2,4-D formulations (calculated by 96% technical) in China by region, 2016
- Figure 5.2-1 Forecast on output of 2,4-D technical in China, 2017–2021
- Figure 5.2-2 Forecast on demand for 2,4-D formulations (calculated by 96% technical) in China, 2017–2021



1. Introduction

This report aims to demonstrate the development of 2,4-D industry in China and analyze 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: 2012-2016

2. Approach for this report

The report is drafted by diverse methods as follows:

✓ 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.

✓ 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

✓ 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 analyze the data and draw conclusions from them.

3. Executive summary

The history of production and application of 2,4-D in China has exceeded 30 years, and 2,4-D's consumption has a stable market demand in China. Farmers prefer to use 2,4-D as a herbicide on wheats, corns and rice and as a plant growth regulator on eggplants, tomatoes, pumpkins and watermelons etc.

Increasing resistance of weeds to glyphosate in recent years and the withdrawal of paraquat aqueous solution (AS) from Chinese market starting at 1 July, 2016 will bring 2,4-D products a new opportunity in China.

Using glyphosate alone would cause weeds' resistance to glyphosate, but if glyphosate is used with other herbicides, such as 2,4-D, dicamba, glyphosate's performance would be boosted effectively. The combinational use of herbicides becomes more and more acceptable to farmers in China.

According to the *No. 1745 Announcement* released by the Ministry of Agriculture of the People's Republic of China on 24 April, 2012, prohibition of the use and sales of paraquat AS in China has come into effect from 1 July, 2016. 2,4-D products and other herbicides would witness a broader space for development after the withdrawal of paraquat AS in China.

When its competitors were in a downturn, 2,4-D products received support from the authorities in terms of export. On 31 Dec., 2014, the Ministry of Finance of the People's Republic of China and the State Administration of Taxation decided to raise the tax rebate of 2,4-D technical from XXX to XXX, which would definitely benefit the export of 2,4-D technical. Thanks to this latest export policy, domestic producers can set a relatively low export price to enhance product's competitiveness.

In recent years, 2,4-D industry in China also confronted with barriers, including sluggish demand from overseas market, pressure from the illegal producers, difficulty in pollutant treatment, etc.



In 2016, the capacity and output of 2,4-D (converted to technical 96%) was XXXX t/a, XXXX tonnes respectively.

Many illegal factories have been producing 2,4-D products during 2011–2012, which had dragged down the growth of market price to some extent because of their additional supply. Otherwise, the growth of 2,4-D's market price should be larger since the demand from downstream industry were impressive at that time. For years, although some legal enterprises associations have tried to beat the illegal production through the authorities, however, this effort was hardly rewarding. What's worse, some illegal 2,4-D manufacturers even exported their 2,4-D products with the help of some import & export companies.

Pollutant treatment is a major problem to 2,4-D technical manufacturers. A great deal of wastewater is generated during the production of 2,4-D technical. With stricter requirements about environmental protection, the pollution problems would restrict the development of 2,4-D industry to some extent. For illegal 2,4-D producers, they don't invest in the pollutant treatment devices, which gives their products an edge on price; thus, the 2,4-D industry was severely disturbed.

Oversupply have occurred in China's 2,4-D industry. It is predicted that policies issued by the government, especially environmental protection policies, will impose the largest effect on its future development.

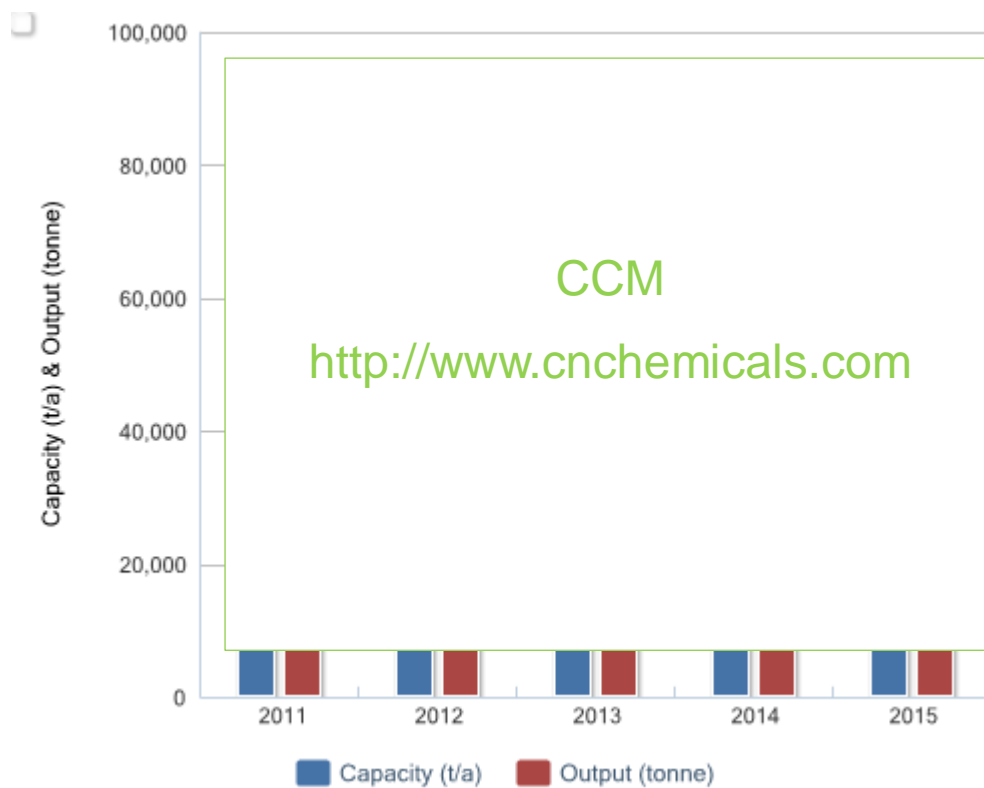
4. What's in the report?

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

From 2011 to 2015, 2,4-D industry in China had witnessed increasing capacity, meanwhile it also confronted with challenge not only from severe competition due to oversupply, but also from environmental protection pressure. The overall operating rate of 2,4-D manufacturers was unstable during these five years.

...

Figure 2.4-1 Capacity and output of 2,4-D technical in China, 2012-2016



Source: CCM

...

In 2016, there have been XXXX active 2,4-D technical producers in China. Changzhou Wintafone Chemical Co., Ltd. is now the largest 2,4-D technical producer in China with the capacity of XXXX t/a and output of XXXX tonnes in 2016, accounting for around XXXX% and XXXX% of the national total respectively.

Table 2.5-1 Production of major 2,4-D technical producers in China, 2014-2016

No.	Producer	Location	Status, as of 2016	Capacity, t/a			Output, tonne		
				2016	2015	2014	2016	2015	2014
1	Changzhou Wintafone Chemical Co., Ltd.	Jiangsu Province	Active	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
2	XXXX	Shandong Province	Active	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
3	XXXX	Zhejiang Province	Active	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
...

Source: CCM

...

Table 3.2-10 Export volume of 2,4-D technical and formulations by producer from China, 2016

No.	Producer	Volume, tonne				
		2,4-D amine salt 720g/L SL	2,4-D amine salt 860g/L SL	2,4-D 96% technical	2,4-D 98% technical	Total
1	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
2	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
3	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
4		XXXX	XXXX	XXXX	XXXX	XXXX
...

Source: China Customs & CCM

...

Table 4.1-1 Production, export, import and apparent consumption of 2,4-D in China, 2012-2016, tonne

Year	Capacity of 2,4-D technical, t/a	Output of 2,4-D 96% technical, tonne	Import volume, tonne	Export, tonne					Apparent consumption volume, tonne
				2,4-D 98% technical	2,4-D 96% technical	2,4-D amine salt 720 g/L SL	2,4-D amine salt 860 g/L SL	Total (converted to 96% technical)	
2012	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
...
2016	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX

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