



CCM Data & Business
Intelligence

Production and Market of Glufosinate-ammonium in China

The Fourth Edition

January 2019

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
Introduction and methodology	3
1 Production	5
1.1 Production of glufosinate-ammonium technical in China, 2013–H1 2018	5
1.2 Production of glufosinate-ammonium formulations in China, 2013–H1 2018	6
2 Producer	7
2.1 Producers of glufosinate-ammonium technical in China, 2013–H1 2018	8
2.2 Producers of glufosinate-ammonium formulations in China, 2013–H1 2018	10
3 Production technology	11
4 Export	13
4.1 Export of glufosinate-ammonium technical in China, 2013–Q3 2018	16
4.2 Export of glufosinate-ammonium formulations in China, 2013–Q3 2018	17
5 Price	20
6 Domestic consumption	22
7 Conclusions	25

LIST OF TABLES

Table 2-1 Status changes of main glufosinate-ammonium TC producers in China, 2013–H1 2018
Table 2.1-1 Capacity and output of glufosinate-ammonium technical producers in China, 2013–H1 2018
Table 2.2-1 Output of glufosinate-ammonium formulations producers in China, 2013–H1 2018
Table 6-1 Planting areas of glufosinate-ammonium's main target crops in China, 2013–2017, '000 ha
Table 6-2 Application parameters of glufosinate-ammonium in main target crops in China, 2017

LIST OF FIGURES

Figure 1.1-1 Capacity and output of glufosinate-ammonium technical in China, 2013–H1 2018
Figure 1.2-1 Output of glufosinate-ammonium formulations in China, 2013–H1 2018
Figure 3-1 Flowchart of glufosinate ammonium technical production in China
Figure 4-1 China's export volume of glufosinate-ammonium, 2013–Q3 2018
Figure 4-2 Export destinations of China's glufosinate-ammonium by export volume and share, 2013–2017, tonne
Figure 4-3 Export destinations of China's glufosinate-ammonium by export volume and share, 2017, tonne
Figure 4-4 China's export volume of glufosinate-ammonium technical and formulations, 2013–Q3 2018
Figure 4.1-1 Monthly export volume of glufosinate-ammonium technical in China, 2017–Q3 2018
Figure 4.1-2 Export destinations of China's glufosinate-ammonium technical by export volume and share, 2013–2017, tonne
Figure 4.1-3 Export destinations of China's glufosinate-ammonium technical by export volume and share, 2017, tonne
Figure 4.2-1 Monthly export volume of glufosinate-ammonium formulations in China, 2017–Q3 2018
Figure 4.2-2 Export destinations of China's glufosinate-ammonium formulations by export volume and share, 2013–2017, tonne
Figure 4.2-3 Export destinations of China's glufosinate-ammonium formulations by export volume and share, 2017, tonne
Figure 5-1 Monthly export prices of 95% glufosinate-ammonium technical and glufosinate-ammonium 200g/L AS in China, Jan. 2013–Sept. 2018

Figure 5-2 Monthly ex-works prices of 95% glufosinate-ammonium technical in China, Jan. 2015–Sept. 2018

Figure 6-1 Consumption of glufosinate-ammonium in China, 2013–2017

Figure 6-2 Consumption pattern of China's glufosinate-ammonium by main target crops, 2017, tonne

1. Introduction

Research scope and targets

Target: This study aims to discover the situation of production and producers, export, price, as well as consumption of glufosinate-ammonium technical and formulations in China.

Region scope: China

Time scope: 2013–Q3 2018, except production and producer chapters with time scope of 2013–H1 2018 and domestic consumption chapter with time scope of 2013–2017.

2. Approach for this report

The report is formulated by methods as follows:

1. Desk research

The sources of desk research are various, including published magazines, journals, government statistics, industrial statistics, customs statistics, 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 production information.

2. Telephone interview

CCM has carried out extensive telephone interviews in order to survey the actual production and producers' situation of glufosinate-ammonium in China.

Interviewees include the following:

- Key producers
- Key traders
- Associations
- Experts

Data processing and presentation

The data collected and compiled are sourced from:

- CCM's database, ValoTracer
- 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
- 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.

3. Executive summary

China's production of glufosinate-ammonium has maintained a spectacular growth in 2013–2017, compared with that in 2008–2012. Soaring demand at home and abroad and XXX are the two most important factors contributing to the dramatic increase.

China's capacity of glufosinate-ammonium TC increased from XXX t/a in 2013 to XXX t/a in 2017, with a CAGR of XXX %; and the output rose from XXX tonnes in 2013 to XXX tonnes in 2017, with a CAGR of XXX % during the same period. The operating rate of glufosinate-ammonium TC in China was relatively low, ranging from XXX % to XXX % in 2013–2017, attributed to the fast capacity expansions of leading producers and newly added capacities.

China's output of glufosinate-ammonium formulations increased from XXX tonnes in 2013 to XXX tonnes in 2017. The increase was mainly boosted by the rocketing demand from both domestic and overseas markets, decreasing production cost, and improving product quality of China's glufosinate-ammonium formulations thanks to domestic producers' technology improvement.

As of December 2018, there are XXX active registrations of glufosinate-ammonium TC and XXX active registrations of glufosinate-ammonium TK in China. Nevertheless, there were only XXX glufosinate-ammonium TC producers in 2017. Among them, XXX was active, and the other three didn't produce glufosinate-ammonium TC in 2017.

The registrations of glufosinate-ammonium formulations in China increased sharply. There were XXX registrations by XXX companies as of June 2017, and there have been XXX registrations by XXX companies as of December 2018. XXX is the key specification with XXX registrations as of December 2018. In spite of a large increase in the number of registrations, there are just a few producers of glufosinate-ammonium formulations in China. Only XXX producers had an annual output of over 100 tonnes in 2017.

There are two main routes for the industrial production of glufosinate-ammonium TC, namely Hoechst route and Strecker route. Hoechst route, which is mastered by Bayer CropScience AG only, is of little pollution and low cost. Chinese producers of glufosinate-ammonium TC take XXX route. In recent years, Chinese producers have improved the production technology for glufosinate-ammonium, achieving lower production cost and better quality.

China's export of glufosinate-ammonium has witnessed considerable increases, surging from XXX tonnes in 2013 to XXX tonnes in 2017, thanks to robust demand from overseas market.

China's export volume of glufosinate-ammonium technical, on average, accounted for XXX % of China's total export of glufosinate-ammonium in 2013–2017. The export destinations of China's glufosinate-ammonium also have been expanding, from XXX in 2013 to XXX in 2017.

In XXX, the export price of China's glufosinate-ammonium, especially its technical, kept fast growing because of XXX. It turned down in general since XXX, thanks to Chinese producers' continuous capacity expansion, and production cost reduction brought by technology improvements in recent years. After July 2016, due to XXX, coupled with XXX, greater demand for glufosinate-ammonium was inspired and the price rebounded.

In China, glufosinate-ammonium is quite important for the weeds control and prevention in orchards, vegetable fields, wasteland reclamation and traditional crop fields. During 2013–2017, the demand for glufosinate-ammonium from glufosinate-ammonium and glyphosate compound pesticides had increased due to XXX. Moreover, after July 2016, China stopped the sales and use of paraquat AS, part of whose market was then replaced by glufosinate-ammonium. Domestic consumption of glufosinate-ammonium increased year by year, from XXX tonnes in 2013 to XXX tonnes in 2017, with a CAGR of XXX % in 2013–2017, higher than that of the domestic herbicides consumption growth during the same period.

In the future, driven by the expanding scale of paraquat prohibition at home and abroad, the development of glufosinate-ammonium and glyphosate compound pesticides, as well as XXX, the market demand for glufosinate-ammonium is expected to remain robust.

The prospect for China's glufosinate-ammonium production will be decided by three major factors: production technology improvement, competitiveness of domestic suppliers, as well as XXX.

Considering the relationship between supply and demand mentioned above, it is expected that the ex-works price of glufosinate-ammonium will XXX in the near future.

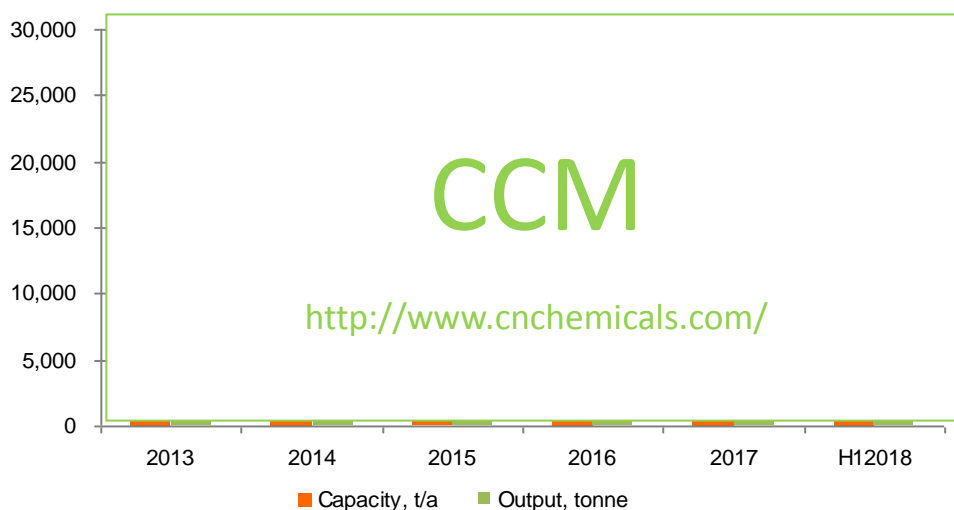
4. What's in this report?

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

1 Production

1.1 Production of glufosinate-ammonium technical in China, 2013–H1 2018

Figure 1.1-1 Capacity and output of glufosinate-ammonium technical in China, 2013–H1 2018



*Note: There are two specifications of glufosinate-ammonium technical produced in China, 95% TC and 50% TK. The technical output here is the total output of both specifications converted to 95% TC. The actual output volume of 50% TK is converted into that of 95% TC here. The calculation formula is as follows: the output volume of 50% TK converted in 95% TC = the actual output volume of 50% TK * 0.5 / 0.95.*

Source: CCM

...

2 Producer

2.1 Producers of glufosinate-ammonium technical in China, 2013–H1 2018

Table 2.1-1 Capacity and output of glufosinate-ammonium technical producers in China, 2013–H1 2018

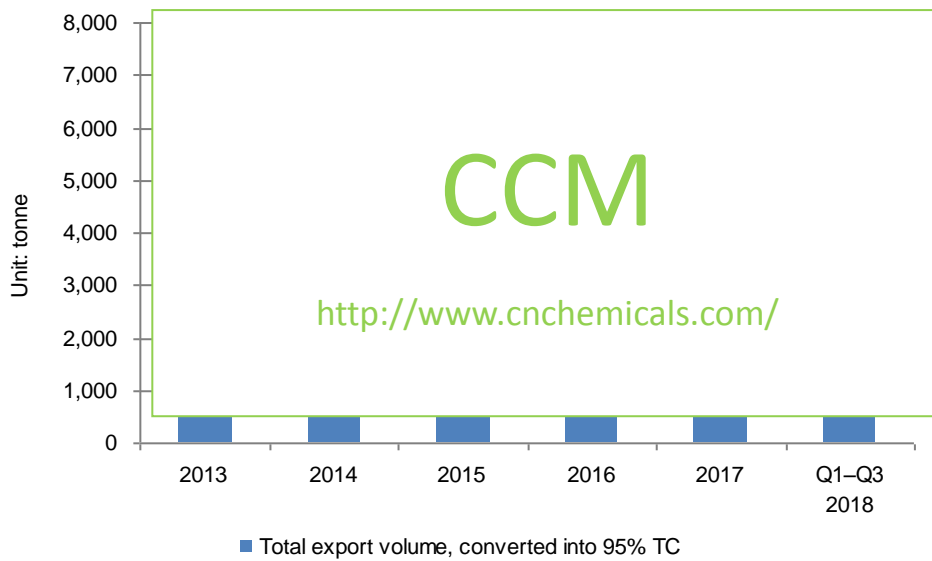
No.	Producer	Status, H1 2018	Capacity (t/a)						Output (tonne)					
			2013	2014	2015	2016	2017	H1 2018	2013	2014	2015	2016	2017	H1 2018
1	Yongnong BioSciences	Active	800	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
2	XXX	Active	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
3	XXX	XXX	500	500	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
4	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
5	XXX	XXX	/	XXX	XXX	XXX	XXX	XXX	/	XXX	XXX	XXX	XXX	XXX
6	XXX	XXX	1,000	1,000	XXX	XXX	XXX	XXX	0	0	XXX	XXX	XXX	XXX
7	XXX	XXX	/	/	/	XXX	XXX	XXX	/	/	/	XXX	XXX	XXX
8	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
9	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
10	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
11	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Others			XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Total			XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

Source: CCM

...

4 Export

Figure 4-1 China's export volume of glufosinate-ammonium, 2013–Q3 2018



Note: 1) The export volume here means the volume converted to 95% TC of all specifications, including both technical and formulations of glufosinate-ammonium.

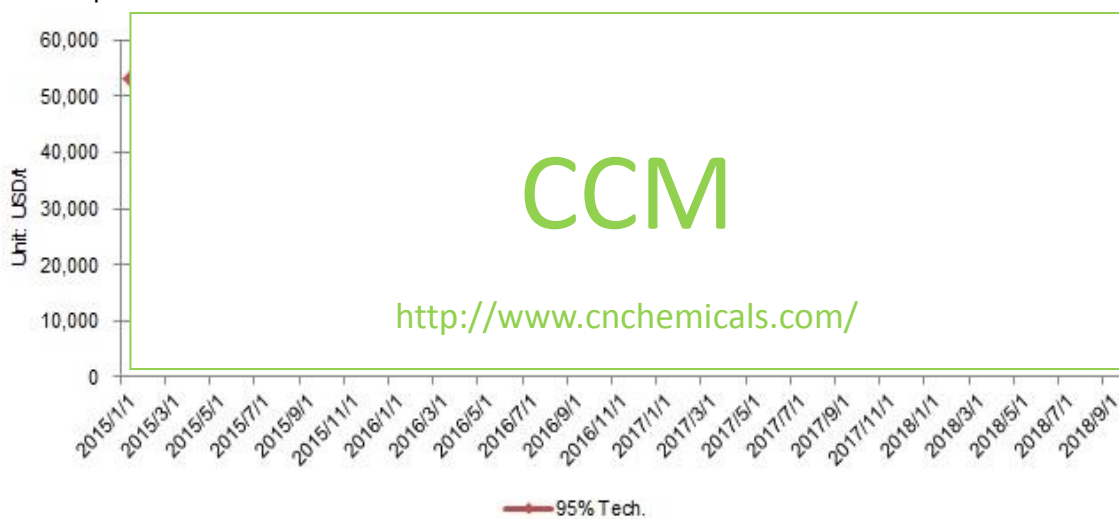
2) The export volume of the specification converted in 95% TC = the actual export volume of the specification * its content rate of active ingredient of glufosinate-ammonium/0.95

Source: China Customs & CCM

...

5 Price

Figure 5-1 Monthly ex-works prices of 95% glufosinate-ammonium technical in China, Jan. 2015–Sept. 2018

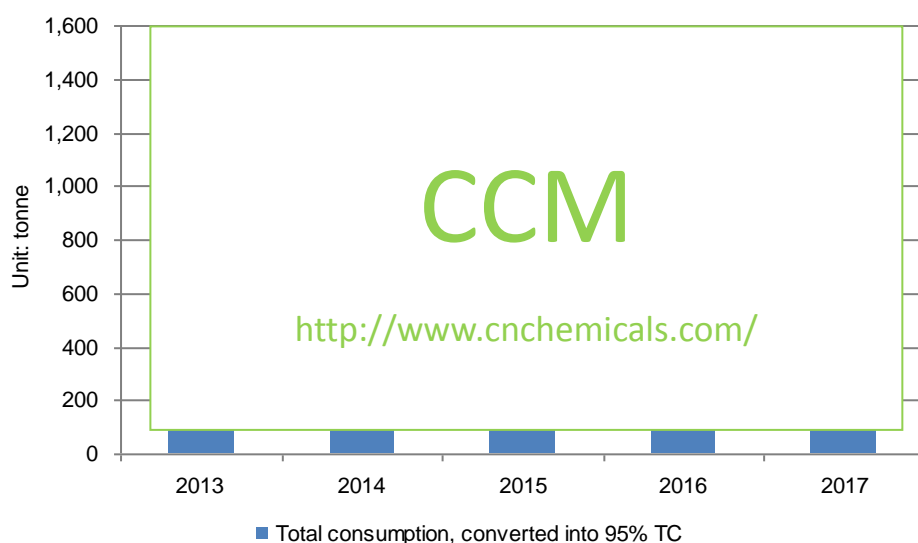


Source: CCM

...

6 Domestic consumption

Figure 6-1 Consumption of glufosinate-ammonium in China, 2013–2017



Note: The consumption in this figure is all the specifications' consumption converted to 95% TC, including both technical and formulations of glufosinate-ammonium.

Source: CCM

...

Table 6-2 Application parameters of glufosinate-ammonium in main target crops in China, 2017

Crop	Annual application frequency	Usage, g(AI)/ha	Rate per application
Orchard	XXX	XXX	XXX %
Vegetables	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

...

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

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

Email: econtact@cnchemicals.com