

Production of Glufosinate-ammonium in China

The Second Edition

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Researched & Prepared by:

Kcomber Inc.

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Introduction

Research scope and targets

Target: This study aims to discover the situation of production and producers of both glufosinate-ammonium technical and its formulations in China.

Region scope: China

Time scope: 2012–2015

1. Methodology

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 cover 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 analyze the data and draw conclusions from them.

Unit

- RMB: currency unit in China, also called Yuan
- USD: currency unit in the US
- Tonne: ton, equaling to metric ton in this report
- t/a: tonne/annual or tonne/year
- /t: per tonne

Glossary

- TC: Technical
- AS: Aqueous solution
- SL: Soluble concentrate

There are two types of glufosinate-ammonium products in China, glufosinate-ammonium technical and glufosinate-ammonium formulations. The two specifications of glufosinate-ammonium technical produced in China are glufosinate-ammonium 95% technical (abbreviated as 95% TC) and glufosinate-ammonium 50% technical (abbreviated as 50% TK). The glufosinate-ammonium formulations produced in China include 100g/L AS, 180g/L AS, 200g/L AS and 280g/L SL.

In this report, the glufosinate-ammonium technical output is the total output of both specifications converted to 95% TC. That means the output volume of 50% TK is not its actual output volume, but the volume converted into that of 95% TC.

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. The output of glufosinate-ammonium formulations in this report is the total output of each specification without any conversions made to them. In the export chapter, CCM also provides the data with all these specifications' volume converted into 95% TC, to facilitate the comparison between output and export. The calculation formula for the specifications is similar to that of 50% TK to 95% TC. For example, the export volume of 200g/L AS converted in 95% TC = the actual export volume of 200g/L AS * 0.2/0.95.

2. Executive summary

China's glufosinate ammonium production of both technical and formulations, has maintained a spectacular growth in 2012-2015 compared with that in 2008-2011. Soaring overseas demand and technology improvement are the two most important factors contributing to the dramatic increase in 2012-2015

China's capacity of glufosinate ammonium technical increased rapidly from XX t/a in 2012 to XX t/a in 2015, with a CAGR of XX in 2012-2015. Growth in output was even more remarkable: volume surging from XX tonnes to XX tonnes during the same period at a CAGR of XX.

China's output volume of glufosinate ammonium formulations has almost tripled in 2012-2015 from XX tonnes to XX tonnes. 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 August 2016, there are XX glufosinate ammonium technical producers in China, seven of which have been active in 2015 and the rest haven't produced any glufosinate ammonium technical in 2012-2015 since they just launched production in 2016. Among the seven active producers in 2015, Yongnong BioSciences Co., Ltd., Lier Chemical Co., Ltd. and Hebei Veyong Bio-chemical Co., Ltd. are the top three suppliers by output.

Despite of the increase in number of registrations of glufosinate ammonium formulations, there are few large producers in China. As of 2015, only five producers had an annual output of more than XX tonnes glufosinate ammonium formulations. XX, XX and XX have been the top three glufosinate ammonium formulation producers in China. The total output of these three producers accounted for XX of the national total in 2012 and the share dropped slightly to XX in 2015.

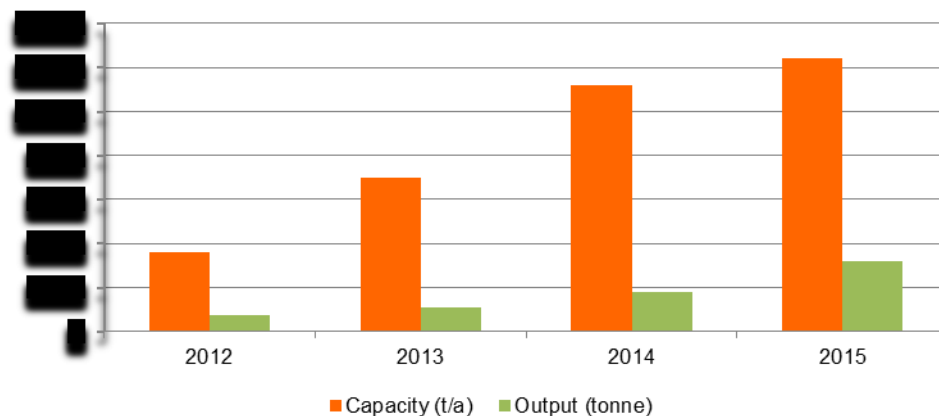
China's export of glufosinate-ammonium has witnessed considerable increases, surging from XXX tonnes in 2012 to XXX tonnes in 2015, thanks to robust demand from overseas market. The export destinations of China's glufosinate-ammonium have been expanding, from XXX in 2012 to XXX in 2015. China's export volume of glufosinate-ammonium technical has accounted for XXX of China's total export in 2012-2015.

In 2012~2014, the export price of China's glufosinate-ammonium, especially its technical, kept growing slightly because of supply shortage. However, it presented a downward trend in general since 2015, thanks to Chinese producers' continuous capacity expansion and production cost reduction because of technology improvements in recent years.

3. What's in this report?

1.1 Production of glufosinate-ammonium technical in China, 2012-2015

Figure 1.1-1 Capacity and output of glufosinate-ammonium technical in China, 2012-2015



Source: CCM

China's glufosinate-ammonium technical production has maintained its spectacular growth in 2012-2015, compared with that in 2008-2011. Soaring overseas demand and technology improvement are the two most important factors contributing to the dramatic increase in 2012-2015.

Driven by robust and fast-growing overseas demand and insufficient supply in 2012-2015, China's capacity of glufosinate-ammonium technical increased rapidly from XXX t/a to XXX t/a, with a CAGR of XXX %. Growth in output was even more remarkable: volume surging from XXX tonnes to XXX tonnes during the same period at a CAGR of 61%.

The low operating rate ranging from XXX % to XXX % in 2012-2015 is attributed to the capacity expansions of leading producers and new added capacities.

- Yongnong BioSciences Co., Ltd., China's largest glufosinate-ammonium technical producer with output accounting for more than XXX % of the national total in 2012~2014 and XXX % in 2015, expanded its capacity from 800 t/a to XXX t/a in 2013, and doubled it to XXX t/a in 2014.
- XXX, the second largest producer since it launched its glufosinate-ammonium technical production with a capacity of XXX t/a in 2013, also expanded its capacity to XXX t/a in 2015.
- Jiangsu Sevencontinent Green Chemical Co., Ltd., launched its glufosinate-ammonium technical production in 2014 with a capacity of XXX t/a and it has been the third largest producer since then.
- XXX. has started to prepare for glufosinate-ammonium technical production since 2014.
- Shandong Weifang Rainbow Chemical Co., Ltd. and Jiangsu Good Harvest Weien Agrochemical Co., Ltd. also have plans to launch glufosinate-ammonium technical production since 2013, each with a capacity of 1,000 t/a.

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2 Producer

2.1 Producers of glufosinate-ammonium technical in China, 2012-2015

Table 2.1-1 Producers of glufosinate-ammonium technical in China, 2012~2015

No.	Producer	Abbreviation	Status, Aug. 2016	Capacity (t/a)				Output (tonne)			
				2012	2013	2014	2015	2012	2013	2014	2015
1	Yongnong BioSciences Co., Ltd.	Yongnong BioSciences	Active	800	xxx	xxx	xxx	xxx	xxx	xxx	xxx
2	xxx	xxx	Active	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
3	Hebei Veyong Bio-chemical Co., Ltd.	Hebei Veyong	Active	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
4	xxx	xxx	Active	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
5	xxx	xxx	Active	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
6	xxx	xxx	Active	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
7	Rosi Chemical Co., Ltd.	Rosi Chemical	Active	/	/	/	200	/	/	/	50
8	Shandong Weitian Fine Chemical Technology Co., Ltd.	Shandong Weitian	Active	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
9	xxx	xxx	Active	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
10	Shandong Weifang Rainbow Chemical Co., Ltd.	Weifang Rainbow	Stopped	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
11	xxx	xxx	Idle	0	1,000	1,000	1,000	0	0	0	0
Total		/	/	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx

Source: CCM

As of August 2016, there are xxx glufosinate-ammonium technical producers in China, seven of which have been active in 2015 and the rest haven't produced any glufosinate-ammonium technical in the past four years since they just launched production in 2016.

- Shandong Weifang Rainbow Chemical Co., Ltd. has stopped production since it launched production in 2016.
- xxx 's production facility has laid idle since it launched production in 2016.

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

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

Email: econtact@cnchemicals.com