

IDAN Survey in China

The Second Edition

Feb. 2017

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	2
1 IDAN production in China	4
1.1 Routes to produce IDAN	4
1.2 Capacity and output of IDAN	4
1.3 Active producers of IDAN	5
1.4 Newcomer of IDAN	6
2 IDAN price in China	7
3 IDAN consumption in China	9
3.1 Glyphosate production	9
3.2 Influencing factor analysis	12
4 Forecast on IDAN market in China in 2017-2021	16
5 Company profiles of top three IDAN producers in China	17
5.1 Chongqing Unisplendour Chemical Co., Ltd.	17
5.2 Leshan Hebang Agricultural Technology Co., Ltd.	18
5.3 Guang'an Chengxin Chemical Co., Ltd.	19

LIST OF TABLES

Table 1.3-1 Capacity and output of active producers of IDAN in China, 2012-2016

Table 3.1-1 Capacity of key glyphosate technical producers by IDAN route in China, 2016

LIST OF FIGURES

Figure 1.1-1 Production process of IDAN by natural gas route in China

Figure 1.2-1 Capacity and output of IDAN in China, 2012-2016

Figure 2-1 Monthly ex-works price of 92% IDAN in China, Jan. 2011-Dec. 2016

Figure 2-2 Monthly ex-works price of glyphosate 95% technical in China, Jan. 2011-Dec. 2016

Figure 3.1-1 Brief pathway of IDAN route for glyphosate technical production in China

Figure 3.1-2 Flowchart of IDAN route for glyphosate technical production in China

Figure 3.2-1 Monthly ex-works price of 98% glycine in China, Jan. 2012-Dec. 2016

Figure 3.2-2 Monthly market price of DEA in China, Jan. 2012-Dec. 2016

Figure 3.2-3 Output of natural gas in China, 2011-2015

Figure 3.2-4 Ex-works price of natural gas in China, 2012-2016

Figure 4-1 Forecast on IDAN output in China, 2017-2021

1. Introduction

IDAN Survey in China 2016 is CCM's report on iminodiacetonitrile (IDAN), an important fine chemical intermediate and especially the main raw material of PMIDA & glyphosate, finished in Jan. 2017. This intelligent report attaches importance to the following parts:

- Production of IDAN (capacity, output and major manufacturers) by volume in China;
- Application (consumption and application fields) of IDAN in China;
- Price of IDAN in China and its influencing factors;
- Glyphosate production by IDAN route in China;
- Influencing factor analysis for glyphosate production by IDAN route in China.

2. Methodology

- Desk research

Sources of desk research are various including published magazines, journals, governmental statistics, industrial statistics, customs statistics, associated seminars as well as information from the internet. A lot of work has been done to compile and analyze the information obtained. When necessary, checks would be made with Chinese market players regarding market information such as production, demand and consumption.

- Telephone interview

The interviewees cover:

- IDAN manufacturers
- Experts
- Traders
- Local governments
- Researchers
- Industrial associations

CCM carried out extensive telephone interviews with almost all IDAN manufacturers. From those active manufacturers and manufacturers that have suspended or stopped production, CCM sourced and verified the detailed production and market information as well as industry insiders' comments on IDAN.

In a bid to understand the application of IDAN in China, CCM also made contact with domestic traders and distributors as well.

- Data processing and presentation

The data collected and compiled are sourced from:

- Published articles from Chinese periodicals, magazines, journals and third-party databases
- Governmental statistics & customs statistics

- Telephone interviews with Chinese manufacturers, traders
- Comments from industrial experts
- CCM's innovative database
- Professional databases from other sources
- Information from the internet

The data from various channels have been combined to make this report as precise and scientific as possible. Throughout the process, a series of internal discussions have been held in order to analyze the data and draw conclusions from it.

- Glossary

IDAN: Iminodiacetonitrile

IDA: Iminodiacetic acid

DEA: Diethanolamine

PMIDA: N-(Phosphonomethyl) iminodiacetic acid

HCN: Hydrocyanic acid

- Units

- Tonne: equals to metric ton in this report
- /t: per tonne
- t/a: tonne/annual, tonne per year
- USD: US dollar, currency unit in the US
- RMB: currency unit in China, also named yuan

3. Executive summary

Iminodiacetonitrile (IDAN) is one of the important intermediates of PMIDA and glyphosate.

China started IDAN commercial production in 2005, but the output was only several hundred tonnes because of limited market size at that time. Since 2006, IDAN has been gradually known in more and more domestic glyphosate producers. They made attempts to use IDAN as raw material, and the experiment has made progress. Since then, domestic IDAN industry has been growing rapidly.

With rapidly increasing demand for glyphosate, the production of IDAN increased a lot in recent years. The output of IDAN has kept increasing in 2012-2014 because of the increasing output of PMIDA & glyphosate technical (IDAN route) during the same period, but it decreased in 2015 and 2016. At the end of 2016, there were four active producers of IDAN in China with a total capacity and output of XX t/a and XX tonnes, respectively. At present, the supply of IDAN is abundant for glyphosate production in China.

Influenced by price of glyphosate technical and cost of raw materials, the price of IDAN in China showed an increasing trend before May 2013 with a highest price of USDXX/t and then decreased to USDXX/t in Oct. 2016. However, the price rebounded to USDXX/t in Dec. 2016.

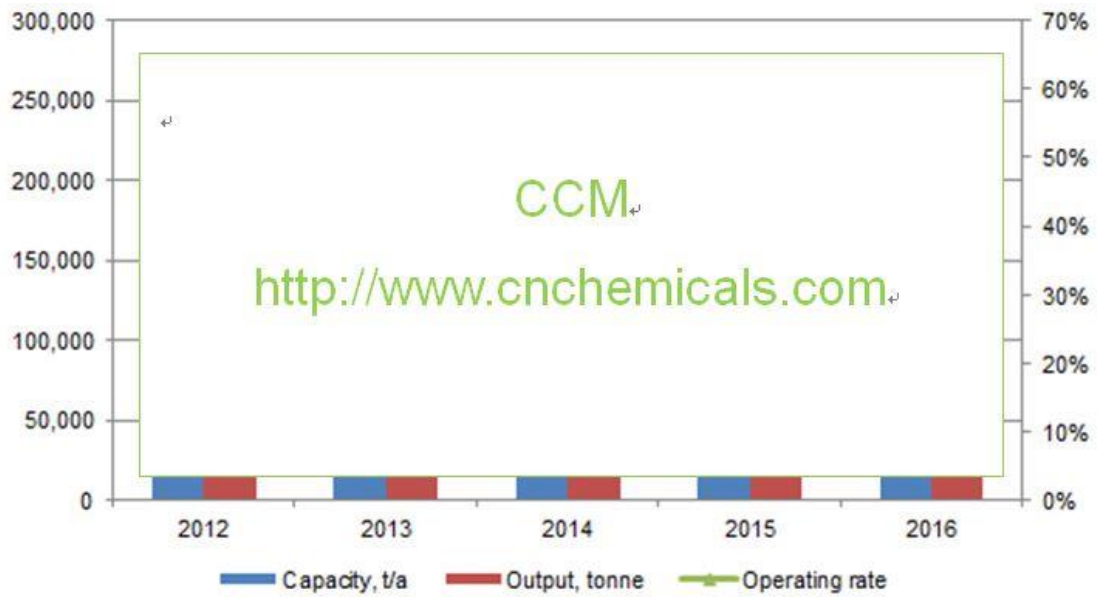
4. What's in this report?

Figure 1.1-1 Production process of IDAN by natural gas route in China



Source: CCM

Figure 1.2-1 Capacity and output of IDAN in China, 2012-2016



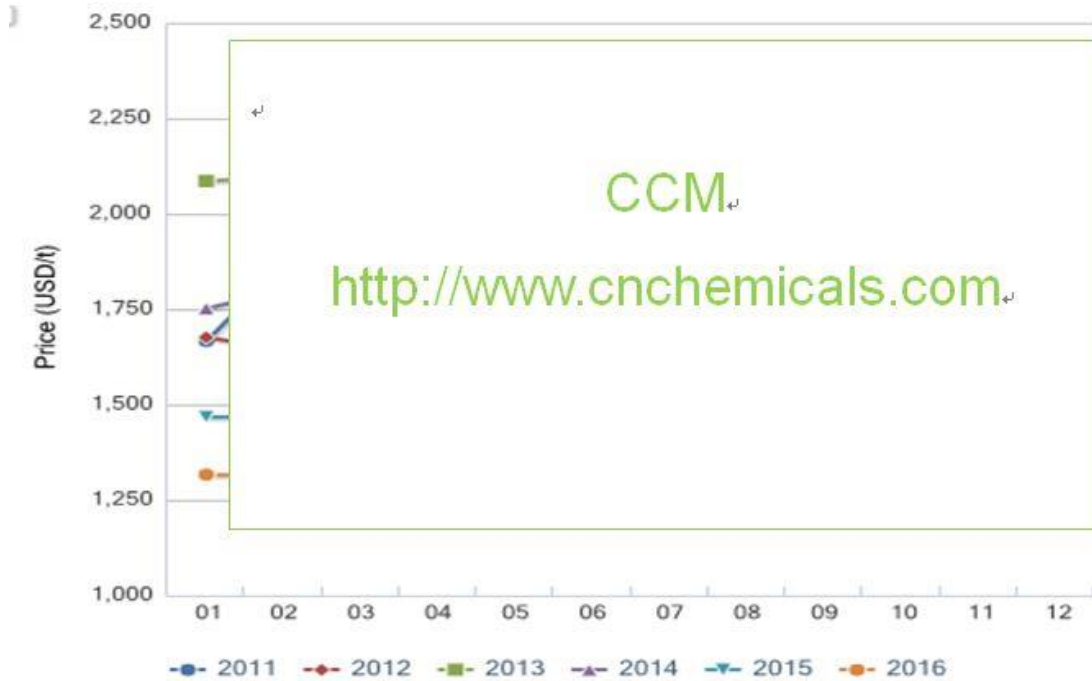
Source: CCM

Table 1.3-1 Capacity and output of active producers of IDAN in China, 2012-2016

No.	Company	Abbreviation	Status, 2016	Capacity, 2016, t/a	Output, tonne				
					2012	2013	2014	2015	2016
1	Chongqing Unisplendour Chemical Co., Ltd.	Chongqing Unisplendour	Active	120,000	XXXX	XXXX	XXXX	XXXX	XXXX
2	XXXXXXXXXXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
3	XXXXXXXXXXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
4	XXXXXXXXXXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
Others			XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
Total			/	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX

Source: CCM

Figure 2-1 Monthly ex-works price of 92% IDAN in China, Jan. 2011-Dec. 2016



Source: CCM

Figure 2-2 Monthly ex-works price of glyphosate 95% technical in China, Jan. 2011-Dec. 2016



Source: CCM

Table 3.1-1 Capacity of key glyphosate technical producers by IDAN route in China, 2016

No.	Company	Capacity, t/a
1	XXXXXXXXXXXX	XXXX
2	XXXXXXXXXXXX	XXXX
3	XXXXXXXXXXXX	XXXX
4	XXXXXXXXXXXX	XXXX
5	XXXXXXXXXXXX	XXXX
6	XXXXXXXXXXXX	XXXX
7	XXXXXXXXXXXX	XXXX
8	XXXXXXXXXXXX	XXXX
9	XXXXXXXXXXXX	XXXX
10	XXXXXXXXXXXX	XXXX
11	XXXXXXXXXXXX	XXXX
12	XXXXXXXXXXXX	XXXX
13	XXXXXXXXXXXX	XXXX
14	XXXXXXXXXXXX	XXXX
Total		XXXX

Source: CCM

Figure 4-1 Forecast on IDAN output in China, 2017-2021



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