

# Production and Producer of Sodium Gluconate and Glucono-delta-lactone in China

The First Edition

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This report is a value chain analysis of the sodium gluconate and glucono-delta-lactone industry in China, which covers the production, major producers, price, production technology and raw material of sodium gluconate and glucono-delta-lactone, and presents the overall development of the industry during 2016–2019.

What had happened to the industries during 2016–2019? How about the performance of the producers? What are the new production technologies? Answers to these questions can be found in this intelligent report.

The key points of this report are listed as below:

- Production of sodium gluconate and glucono-delta-lactone (capacity, output) by volume in China in 2016–2019

- Production technology and key manufacturers information of sodium gluconate and glucono-delta-lactone

- Market of raw materials in 2016–2019

- Price development in 2016–2019



#### 2 Executive summary

Sodium gluconate (SG), the sodium salt of gluconic acid, is used in concrete additive, water quality steadying agent, food and electroplating detergent industries in China. Glucono-delta-lactone (GDL) is a harmless food additive to human body. During the past two years, these two industries have seen increasing output and consumption in China.

#### - Sodium gluconate

As of XXX, there were XXX manufacturers with SG capacity greater than XXX. The output of the top four SG producers in XXX accounted for XXX of total national SG output. In XXX, SG output in China increased to XXX tonnes, up XXX year on year, encouraged by growing demand at home and abroad.

As the price of raw material corn came down in XXX, the annual average ex-works price of SG dropped to XXX, down XXX year on year.

As to SG production technology, enzyme method has developed rapidly in recent years thanks to no fungal residue and less energy consumption.

#### - Glucono-delta-lactone

As of XXX, there were XXX active GDL producers in China. Capacity of the top XXX producers accounted for XXX of the national total. The output of GDL increased during XXX due to the growing demand from home and abroad, with GDL operating rate of XXX in XXX and about XXX in XXX.

As people's health consciousness constantly enhanced, the demand for GDL grew at XXX annually in recent years. The growth of demand outpaced that of supply, so the price was at a high level in XXX and XXX. Besides, XXX had strong pricing power after taking charge of large part of domestic GDL sales.

Moreover, there are four methods for GDL production, namely fermentation method, catalytic oxidation method, glucose oxidase method and electrolytic oxidation method, with glucose or starch as starting material.



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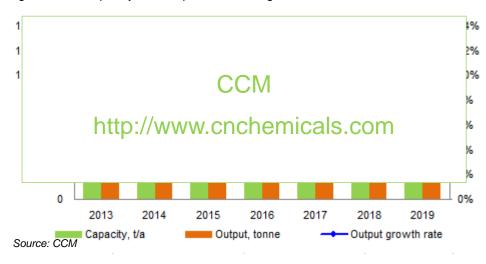


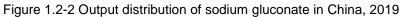
Figure 1.1-1 Capacity and output of sodium gluconate in China, 2013–2019

#### Table 1.2-2 Capacity and output of major sodium gluconate producers in China, 2016–2019

| No.           | Producer            | Capacity, t/a |      |      |      | Output, tonne |        |       |        |       |        |       |        |
|---------------|---------------------|---------------|------|------|------|---------------|--------|-------|--------|-------|--------|-------|--------|
|               |                     |               |      |      |      | 2019          |        | 2018  |        | 2017  |        | 2016  |        |
|               |                     | 2019          | 2018 | 2017 | 2016 | Solid         | Liquid | Solid | Liquid | Solid | Liquid | Solid | Liquid |
| 1             | Shandong<br>Fuyang  | ххх           | ххх  | xxx  | xxx  | xxx           | xxx    | xxx   | xxx    | xxx   | xxx    | xxx   | xxx    |
| 2             | Zhucheng<br>Xingmao | xxx           | xxx  | ххх  | ххх  | ххх           | xxx    | XXX   | xxx    | ххх   | xxx    | xxx   | xxx    |
|               |                     | XXX           | XXX  | XXX  | XXX  | XXX           | XXX    | XXX   | XXX    | XXX   | XXX    | XXX   | XXX    |
| Total XXX XXX |                     | XXX           | XXX  | XXX  | XXX  | XXX           | XXX    | XXX   | XXX    | XXX   |        |       |        |

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Figure 2.1-1 Capacity and output of GDL in China, 2016–2019

Source: CCM

| No. | Producer              |      | Capac | ity, t/a |      | Output, tonne |      |      |      |  |
|-----|-----------------------|------|-------|----------|------|---------------|------|------|------|--|
|     | Fiblucei              | 2019 | 2018  | 2017     | 2016 | 2019          | 2018 | 2017 | 2016 |  |
| 1   | Shandong<br>Hongsheng | XXX  | xxx   | XXX      | XXX  | xxx           | XXX  | xxx  | xxx  |  |
| 2   | Shandong Kaixiang     | XXX  | XXX   | XXX      | XXX  | XXX           | XXX  | XXX  | XXX  |  |
|     |                       | XXX  | XXX   | XXX      | XXX  | XXX           | XXX  | XXX  | XXX  |  |
|     | Total                 | XXX  | XXX   | XXX      | XXX  | XXX           | XXX  | XXX  | XXX  |  |

Source: CCM

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