

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

1 Market overview

1.3 Polylactic acid market in China, 2011-2016

China has begun the commercial production of PLA since 2006, before when only a few companies were carrying out the research and pilot production. Zhejiang Hisun Biomaterials Co., Ltd. (Zhejiang Hisun) is the first commercial PLA producer in China with █ t/a capacity in 2006. Thanks to the government's encouragement and technological breakthrough, some producers enlarged their production line in the past few years. Especially in 2010, some new players such as Shenzhen BrightChina Industrial Co., Ltd. entered the PLA industry, while some producers finished the enlargement of their production line at the same time. Thus, PLA's total domestic capacity increased dramatically in 2010.

From 2007 to 2011, domestic PLA capacity increases from █ t/a to █ t/a, with a CAGR of █%. The output increases from █ tonnes to █ tonnes, with a CAGR of █%.

2 Production situation in China, 2011

In 2012, there are █ major active lactic acid (LA) producers in China. The total capacity of domestic LA is █ t/a while the output is █ tonnes in 2011, █ tonnes less than that of 2010.

Table 2.2-2 Major LA producers' production information in China, 2010-2011

No.	Abbreviation	Capacity, t/a		Output, t	
		2011	2010	2011	2010
1	Henan Jindan	█	█	█	█
2	Anhui B&G	█	█	█	█
3	Yancheng Haijianuo	█	█	█	█
4	Musashino China	█	█	█	█
5	Wuhan Gude	█	█	█	█
6	Chongqing Bowflex	█	█	█	█
7	Hebei Xinhua	█	█	█	█
8	Ningxia Hypow	█	█	█	█
9	Liaoning Sinolac	█	█	█	█
10	Shandong Fullsail	█	█	█	█
Subtotal		█	█	█	█
Others		█	█	█	█
Total		█	█	█	█

Source: CCM International

5 Polylactic acid consumption in China

5.1 Consumption pattern, 2010-2011

In 2011, ■ tonnes of PLA is consumed in China. Plastic commodity is the biggest end user of domestic PLA, accounting for over ■% of total PLA consumption in China. Meanwhile, there are three kinds of plastic-commodity PLA, namely articles for daily use, disposable package & tableware and non-disposable package & tableware. Among them, articles for daily use is the biggest end user where ■ tonnes of PLA is consumed, accounting for ■% of the total PLA consumption in China.

7 Production cost

7.2 Production cost of polylactic acid producers

7.2.1 Zhejiang Hisun Biomaterials Co., Ltd.

- Estimated raw material cost

Table 7.2.1-1 Estimated raw material costs of PLA in Zhejiang Hisun, Jan. 2012

No.	Raw materials	Consumption, Unit/t	Unit	Price, USD/Unit	Unit cost, USD/t
1	90% L-lactic acid	■	Kg	■	■
2	Catalyst	/	/	/	■
Total		/	/	/	■

Source: CCM International

- Estimated manufacturing cost

Table 7.2.1-2 Estimated manufacturing cost of PLA in Zhejiang Hisun, Jan. 2012

No.	Item		Unit cost, USD/t
1	Raw materials		■
2	Utilities	Water	■
		Electric power	■
		Steam	■
3	Labor ①		■
4	Packing		■
5	Depreciation ②		■
Total			■

Note: ① There are totally ■ ordinary operators for PLA production in Zhejiang Hisun. Average salary is USD ■ per month. ② Theoretically, by ring-opening polymerization technology, the fixed assets per tonne PLA are about USD ■ and are paid in equal installments in ten years. Zhejiang Hisun's operating rates of PLA is about ■% in 2011. Thus, the actual depreciation is USD ■/t in 2011.

Source: CCM International