

Global and China 1,4-Butanediol (BDO)
Industry Report, 2011-2012

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## The Vertical Portal for China Business Intelligence

#### STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

#### REPORT OBJECTIVES

- ◆ To establish a comprehensive, factual, annually updated and costeffective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- ◆ To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

#### **METHODOLOGY**

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications.

Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

#### **INFORMATION SOURCES**

The primary information sources include National Bureau of Statistics of China and China Customs etc.

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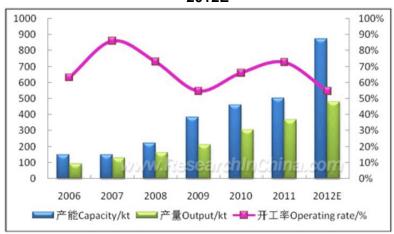
## **Abstract**

As a kind of important raw material of organic chemicals and fine chemicals, 1,4-butanediol (BDO) can generate a variety of derivatives like THF, PTMEG, GBL, etc., which, together with BDO, have found wide application in PBT plastics, spandex, polyurethane, pharmaceutical, cosmetics and other fields.

Due to high technical barriers and limited sources of raw materials, the global BDO production is relatively concentrated, with capacity mainly distributed in Asia, the United States and Europe in 2011, of which, Asia accounted for 56.6%. Worldwide BDO manufacturers mainly refer to BASF, Dairen Chemical Corp., Lyondellbasell, ISP and Shanxi Sanwei Group Co, Ltd., whose aggregate BDO capacity in 2011 shared nearly 60% of the world's total.

Chinese BDO industry has been developed from the introduction of foreign technologies, with rapid capacity growth in 2006-2011, accompanied by a CAGR of 27.6%, resulting in gradually declining foreign dependence. In 2011, China's BDO demand was approximately 430 kilotons, output 370 kilotons, and foreign dependence degree decreased to around 14%. In 2012, about 370 kilotons of BDO capacity in China are scheduled to be put into production successively; with the gradual release of the new capacity, it is expected that China's BDO market in 2013 will see overcapacity.

BDO Capacity, Output and Operating Rate in China, 2006-2012E



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China's BDO industry features a high degree of concentration. In 2011, aggregate capacity of the top three manufacturers accounted for over 50% of the total. Shanxi Sanwei Group Co, Ltd. is currently the largest Chinese BDO manufacturer, possessing 75 kt/a production facilities with Reppe process and 75 kt/a ones with maleic anhydride method, serving as China's only BDO manufacturer with the independent intellectual property rights of Reppe process. Xinjiang Markor Chemical Industry Co., Ltd. and Nanjing Bluestar New Chemical Materials Co., Ltd. respectively ranked No.2 and No.3 nationwide in 2011 by dint of annual capacities of 60 kilotons and 55 kilotons.

Concerning BDO production in Chinese Mainland, except for Dalian Chemical (Jiangsu) Co., Ltd., basically employs Reppe method and maleic anhydride method. Following the gradual implementation of China's restriction on the development of energy intensive industries and the polices of energy conservation & emission reduction, the ratio of BDO device with Reppe method will be reduced in future; while the maleic anhydride method, by virtue of low investment, good quality, less waste emissions, etc., will see rapid development.

Global and China 1,4-Butanediol (BDO) Industry Report, 2011-2012 by ResearchInChina mainly covers the followings:

- Regional capacity, supply & demand, competitive landscape, leading manufacturers and technologies, etc. of the global BDO industry;
- Q Supply & demand, consumption structure, competitive landscape, imports & exports, price analysis, BDO projects planned or under construction, etc. of Chinese BDO industry;
- Supply & demand, consumption structure, competitive landscape, imports & exports, price analysis, development forecasts, etc. of global and China PTMEG industry;
- Supply & demand, consumption structure, imports & exports, price analysis, etc. of global and China PBT/GBL industry;
- Operational status, BDO business, progress of partial BDO projects
   planned or under construction, etc. of global and Chinese twelve
   BDO manufacturers.

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