

# 1,4-Butanediol Market, By Application & Geography, Trends & Forecasts to 2017

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## Abstracts

1,4 butanediol, commonly known as BDO, is an organic compound predominantly used as a solvent in industrial cleaners and glue removers like tetrahydrofuran (THF). BDO is a saturated carbon-4 straight-chain dibasic alcohol. It is a colorless and almost odorless viscous liquid at room temperature. It is an important intermediate chemical for tetrahydrofuran and polytetramethylene ether glycol (PTMEG), polybutylene terephthalate (PBT), gamma-butyrolactone (GBL), polyurethane (PU), and other solvents. These chemicals are widely used in fibers, engineering plastics, medicines, cosmetics, artificial leather, pesticides, plasticizers, hardener, solvent and rust remover, etc. Tetrahydrofuran is the largest application market for BDO, which has occupied largest chunk of BDO market.

1,4-butanediol was first commercially produced in 1930, by using acetylene and formaldehyde. This process was developed by Dr. Reppe, hence known after his name as Reppe process. Another important technologies employed into the manufacturing of BDO are Davy process, propylene oxide process, butadiene process, allyl acetate, and bio-based process.

The report estimates the market size of 1,4-butanediol industry for major applications such as tetrahydrofuran, polybutylene terphthalate, gamma butyrolactone, polyurethane, and others. It provides a comprehensive review of market drivers, restraints, opportunities, challenges, and key issues in the market. The market is further segmented and forecasted for major geographic regions, such as North America, Europe, Asia, and Rest of the World (ROW). Major countries with the market volume and revenue are covered for each of the region. The top players of the industry are profiled in detail with their recent developments and other strategic industry activities.

The global BDO market was 1,725.0 kilo tons in 2011 and is estimated to reach 2,548.5 kilo tons by 2017, growing at a CAGR of 5.5% from 2012 to 2017. Asia-Pacific is leading accounting for more than 55% of total volume consumed in 2011 ROW market for BDO is expected to advance at rapid pace during the next few years and it will remain the fastest growing region for BDO. Europe and North America constitute second and third largest market for BDO.

The drivers of the industry are identified as high growth in developing regions, high demand in end-user industries, and high existing production capacities of 1,4-butanediol. Most of the production capacity of 1,4-butanediol exists in Asian region and high growth in their demand is mainly observed in developing countries. The high production capacities in the region also give flexibility to the manufacturers to scale up the production depending upon demand trends. The restraining factors are identified as raw material price volatility and high manufacturing cost of the 1,4-butanediol industry. The issues in the market are mainly pertaining to that of a maturing industry, i.e. steady growth in mature markets such as U.S. and Europe; and environmental concerns as well. The industry players are following strategies such as consolidation and capacity expansion to address to the demands generated by end-user industries and developing countries. Global BDO market is highly concentrated. This can be mainly attributed to the barriers existed in the sourcing of production technology and raw materials.

The major players in the market are BASF SE (Germany), Dairen Chemicals (Taiwan), LyondellBasell Chemicals (The Netherlands), Shanxi Sanwei Group (China), International Specialty Products (U.S.), Invista (U.S.), and Mitsubishi Chemicals (Japan).

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