

## Butanediol Methodology

1,4-Butanediol (BDO) is an intermediate product; a colourless and almost odourless viscous liquid. Around 32 percent of BDO usage goes into the production of engineering plastic PBT, with another 32 percent going towards the manufacture of tetrahydrofuran (THF), also known as Lycra or spandex. A further four percent goes in to the production of paint remover gamma-butyrolactone (GBL) and 12 percent goes to polyurethanes, fibres coatings, elastomers and foams sectors.

BDO feedstocks are acetylene and formaldehyde; butane via maleic anhydride; butadiene; and propylene oxide.

Butanediol is not a skin irritant, but prolonged skin contact may cause slight irritation. Its vapours may cause mild irritation and possible reddening of the eyes. Proper respiratory and protective eyewear should be worn as inhalation of high vapour concentrations may cause irritation of the mucous membranes or the respiratory, and have a narcotic effect with symptoms of drunkenness.

Butanediol is stable under ordinary conditions of use and storage. It is combustible and is a slight fire hazard when exposed to heat or flame. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use powder, alcohol-resistant foam, water spray or carbon dioxide to extinguish fire.

Around two-thirds of the BDO market is captive and more than half of the remaining third is tied up in long-term contracts.

ICIS pricing quotes butanediol in **Europe/North America, Asia-Pacific and China**

### **Frequency:**

All reports published weekly on Tuesdays

### **Butanediol (EUROPE/NORTH AMERICA)**

### **Weekly Price Assessments:**

#### *Contract Prices*

- FD NWE Quarterly price (EUR/MT & conversion to US CTS/LB)
- DELIVERED (North America) quarterly price (US CTS/LB & conversion to USD/MT)

## **Butanediol (ASIA-PACIFIC)**

### **Weekly Price Assessments:**

#### *Contract prices*

- DEL KOREA Monthly (for bulk) (USD/MT & conversion to US CTS/LB)
- DEL TAIWAN Monthly (for bulk) (USD/MT & conversion to US CTS/LB)

#### *Spot prices*

- CFR CHINA MAIN PORT (for drummed) (USD/MT & conversion to US CTS/LB)
- CFR CHINA Main Port (for bulk) (USD/MT & conversion to US CTS/LB)
- DEL CHINA (CNY/MT & conversion to US CTS/LB)

#### *Butanediol Feedstock Prices*

- PROPYLENE CFR N.E.ASIA (USD/MT)
- BUTADIENE CFR N.E.ASIA (USD/MT)

## **Butanediol (CHINA)**

### **Weekly Price Assessments:**

#### *Spot import prices - drums*

- CFR CHINA MAIN PORT (USD/MT)

#### *Spot domestic prices - bulk*

- DEL EAST CHINA (CNY/MT)



### **General Information:**

**Assessment window:** Price assessments are based on information supplied by market participants through the week up to close of business on Tuesdays at 17:00 hours in Shanghai, London and the US, and 18:00 hours in Singapore.

**Specifications:** Product assessed is of 99.0 percent minimum purity, 0.05 percent maximum water content and a colour APHA of 10.

**Timing:** In Asia, cargoes are delivered within four-six weeks from the date of publication, while in Europe and the US cargoes will usually be delivered within four weeks of the publication date. In the China report, domestic cargoes are for loading or delivery one week forward from the date of publication, while import cargoes are for loading or delivery four-six weeks forward from the date of publication.

**Terms:** 30-60 days after bill of lading date. In Asia, credit terms are typically up to 90 days. In China reports, typically 180 days after bill of lading date.

**Standard cargo size:** In Asia, CFR China (drummed) spot quotes are based on 14.4 tonnes per drum. Standard cargo size for CFR China (bulk) and DEL China reflects those without packaging costs, delivered ex-tank via car/truck, typically ranging from 20 tonnes. In Europe, typical truck/railcar sizes are 20-25 tonnes, while in the US the standard size is around 50,000 lb.

**Assessment Basis:** The European quote assessment is based on information from a cross-section of the market, including buyers and sellers. The quote incorporates discussions and price delta movements from the previous settlement. The North American quote is on a delivered basis for truck/railcars, predominantly in the US market. In Asia, the report carries details from business transacted and discussed in China, Korea and Taiwan.

Price assessments for the Asian and Chinese BDO spot quotes are based on transactions, bids and offers heard through the reported week (Wednesday-Tuesday). Both European and US reports cover quarterly contact price information only. Prices are assessed and amended as near to the first week of each quarter as possible, depending on the exact timing of when discussions are concluded.

Following the price ranges, each report carries a market commentary which includes news on the supply/demand balance. If applicable, there is also information on transactions, export/import information news, contract price negotiations and general sentiment for price direction. Comments on up and downstream market developments and general market intelligence may also be included.

3 February 2014