

# Chemical profile: Asia butadiene

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Butadiene (BD) is used primarily as a chemical intermediate and polymer component in the manufacture of synthetic rubber.

It is a major raw material for styrene butadiene rubber (SBR) and polybutadiene rubber (PBR).

SBR is the largest consumer of BD followed by PBR.

SBR and PBR are major raw materials used in the production of tyres for the automotive industry.

The next largest consumers of BD are styrene butadiene latex (SBL) and acrylonitrile butadiene styrene (ABS) resins. It is also used to make adiponitrile (ADN) for nylon 6,6 production.

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## SUPPLY/DEMAND

Supply may be balanced in the near term as several major South Korean and Taiwanese BD producers have switched to using more liquefied petroleum gas (LPG) partially as a feedstock, given the higher naphtha costs. Using more LPG will yield less BD.

Demand is also expected to pick up in the near term as new downstream SBR plants have either started up or are expected to start up in China and India.

China's Zhejiang Weitai Rubber has started up its new 100,000 tonne/year SBR plant in Zhejiang province in the second quarter of this year while Indian conglomerate, Reliance Industries (RIL) is scheduled to start up its new 150,000 tonne/year SBR plant in Hazira in the third quarter.

## PRICES

Asia BD prices may still have room to climb in the near term because of strong demand and limited spot availability.

However, the upward price momentum of BD may be capped by the soft natural rubber (NR) prices amid a supply glut.

NR and the downstream SBR and PBR are substitute raw materials in the production of tyres and their price movements tend to influence each other.

Additional BD capacities coming onstream in China this year are also expected to cap any significant price increase in BD.

China's Shanghai SECCO Petrochemical is expected to start up a new 90,000 tonne/year BD unit in Shanghai in July while Fujian Refining & Petrochemicals (FREP) has started commercial production of its new 60,000 tonne/year BD unit in Quanzhou, Fujian province in the second quarter.

## **TECHNOLOGY**

BD is produced as a by-product of the same steam cracking process used to produce ethylene and other olefins.

Traditionally, BD has been made from heavier feedstocks such as naphtha as it results in greater yield.

But with the abundance of lighter feedstocks, more BD may be made from ethane, despite the lower yield.

On-purpose BD plants, which makes BD by dehydrogenating normal butane, are also in the pipeline in Asia. China's Shandong Wanda Chemical is expected to start up its new on-purpose 150,000 tonne/year BD unit at Dongying in Shandong province in the third quarter of this year.

## **OUTLOOK**

Asia market players are confident that BD prices will continue to remain firm in the near term at around \$1,350-1,400 /tonne CFR NE Asia in view of the strong demand for June and July shipments.

If the downstream SBR and PBR prices continue to move upwards, there will be buyers' support for BD prices rising to above \$1,400/tonne CFR NE Asia.

However, the downstream SBR and PBR producers are adopting a cautious stance because of the NR glut which may weigh down demand for SBR and PBR and put a cap on the synthetic rubber price increases. The uncertain market outlook for Thailand and Indonesia, both key production centres for major automotive makers in Southeast Asia, is also expected to dampen buying sentiment for synthetic rubber.

In view of the relatively subdued automotive industry in Asia, it may be difficult for the BD price to continue to trend up for the rest of the year because the major downstream SBR and PBR producers will resist any significant BD price hikes – which will erode their margins.

*SOURCE Icis News*