



Helen Yan is ICIS's resident expert on the Asian market for nitrile rubber (NBR). We ask her some questions about the market for this oil-resistant rubber.

Q: What is nitrile rubber made from?

A: Nitrile rubber or NBR is a synthetic rubber copolymer of acrylonitrile (ACN) and butadiene (BD). It is commonly considered the workhorse of the industrial and automotive rubber product industries. It is used in a wide variety of application areas requiring oil, fuel and chemical resistance.

Q: Can you change its oil resistance?

A: Its physical and chemical properties vary depending on the polymer's composition - the more acrylonitrile within the polymer, the higher the resistance to oils, but the lower the flexibility of the material.

Q: What kind of products are made from NBR?

A: Its resilience makes NBR the perfect material for disposable lab, cleaning and examination gloves. NBR's ability to withstand a range of temperatures from -40°C to 120°C (248°F) also makes it an ideal material for extreme automotive applications. In the automotive sector, it is used in fuel- and oil-handling hoses, seals and grommets.

Q: Where are the main producers based in Asia?

A: In Asia, the major NBR producers are based in China, Japan, South Korea and India. End-users can be industrial belt makers, automotive component manufacturers or footwear makers. Apart from selling to end-users in these various industrial segments, it is also traded and sold via distributors and stockists in Asia.

Q: China is a powerful economic force. Does China have its own production?

A: Although China has its own domestic NBR producers, namely Lanzhou Petrochemical, Ningbo Shunze Rubber and Zhenjiang Nantex, China still needs to import NBR to meet

its needs. The major exporters of NBR to China are the South Korean, Japanese and Russian NBR producers. Japanese NBR is marketed as a premium product for the automotive application sector and commands a premium price.

Q: What about other trade flows?

A: The South Korean NBR producers such as LG Chem and Korea Kumho Petrochemical Co (KKPC), which are major NBR producers in Asia, also export their products to other regions, including India, Europe and the US.

Q: What drives the NBR price in Asia?

A: As the supply/demand balance is a major factor in determining the pricing trend of the product, any unscheduled plant shutdown or unplanned outage has a crucial bearing on the market. As acrylonitrile and butadiene are the major feedstocks in NBR, the prices of these raw materials are important in determining the margins or profitability of NBR. As butadiene prices can be rather volatile and can fluctuate wildly by several hundred dollars in the course of one month, NBR prices tend to be impacted by the butadiene prices, a major price driver of synthetic rubber prices, including NBR prices.

Q: What does the rest of the year look like?

A: The outlook for the rest of the year is determined by several factors, including the raw material prices, and demand. In light of the uncertain macroeconomic outlook, the outlook for NBR for the next six months remains cloudy. The eurozone debt crisis, a fragile US economic recovery, and slowing economies in China and India, have dampened buying sentiment and eroded consumer confidence. Demand for petrochemicals that are used in housing, industrial and automotive sectors has slowed as a result. NBR is no exception.



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