Butyl Rubber business unit (BTR)

The Butyl Rubber business unit of specialty chemicals group LANXESS AG is one of the world’s leading manufacturers of butyl rubber.

One of the most important properties of this elastomer is its high impermeability to moisture and gases, such as air. As one of the world’s major manufacturers of synthetic rubber, LANXESS offers a range of butyl rubbers that consists of three product families – regular butyl, bromobutyl and chlorobutyl rubber. Only a very few manufacturers worldwide have mastered the production of the latter two, often referred to as halobutyl rubber.

The most important market for halobutyl rubbers is the tire industry – it uses these rubber raw materials to make gas-tight inner liners in tubeless tires for cars, trucks, buses and bicycles. Among manufacturers of vehicle tires, the worldwide demand for butyl rubber is growing all the time. In this field, LANXESS products help to protect the steel cord from moisture and maintain the tire pressure at a constant level for longer, thereby saving fuel. In addition, halobutyl rubbers have proven their impermeability to gas and resistance to chemicals in vehicle air conditioning systems and tank linings.

Regular butyl is used in tubes for the tire industry, bicycle tubes and balls. Halobutyl rubber is used to manufacture protective clothing and stoppers for the pharmaceutical sector. One other interesting niche market is the chewing gum industry.

The BTR business unit is part of LANXESS’ Performance Polymers segment, which achieved total sales of EUR 2.388 billion in fiscal 2009. It is headed by Ron Commander.
Key brands and products

LANXESS Butyl: Regular butyl is a copolymer made of isobutene and small amounts of isoprene and is distinguished by its high impermeability to gas and good resistance to heat, weather and ozone. In addition, it is very resistant to chemicals and demonstrates a high capacity to absorb energy. Alongside its application in tubes, the copolymer is therefore also used in the inner linings of tanks and in conveyor belts.

LANXESS Chlorobutyl: This synthetic rubber is created by the chlorination of LANXESS Butyl and, compared to regular butyl, is characterized by faster vulcanization times and improved adhesion to other unsaturated polymers. The heat and ozone resistance of the vulcanizates is generally better than those made from regular butyl. Chlorobutyl vulcanizates also demonstrate a stronger resistance to fatigue cracking and a better compression set.

LANXESS Bromobutyl: The properties of vulcanizates made from LANXESS Bromobutyl are largely identical to those produced from LANXESS Chlorobutyl. However, vulcanization takes place even more quickly and it is possible to further increase the adhesion to other unsaturated rubbers.

Sites
Zwijndrecht (Belgium) and Sarnia (Canada).

Detailed information can be found at: http://techcenter.lanxess.com/br/

LANXESS is a leading specialty chemicals company with sales of EUR 5.06 billion in 2009 and currently around 14,400 employees in 23 countries. The company is represented at 42 production sites worldwide. The core business of LANXESS is the development, manufacturing and marketing of plastics, rubber, intermediates and specialty chemicals.

Leverkusen, September 15, 2010