

Ion Exchange Resins

Lanxess continues on path of growth despite difficult market environment

Specialty chemicals group, Lanxess AG recently organised its third international media day in Cologne, Germany. One of their key potential areas is ion exchange resins business and they recently started its manufacturing plant for resins in Gujarat, India.



Introduction

Lanxess AG is satisfied with its business development this year and sees itself in a strong position for the coming years. The group confirmed its earnings forecast and the targets set for fiscal 2008. At the media day, Axel C. Heitmann, CEO of Lanxess presented group's strategy for countering the effects of the global economic turbulence. The group is placing special focus on speeding the pace of its expansion in the BRIC countries (Brazil, India, and China) with its successful growth projects. The group, by 2009, will have invested a total of EUR1bn worldwide.

Ion exchange resins - small but multi-talented

Dr. Michael Zobel, Head of the ion exchange resin business unit at Lanxess AG, discussed the unit's performance. The unit currently generates a turnover of up to EUR200mn annually.

Its new state-of-the-art facility is currently under construction in India and will enable Lanxess as of 2010 to take full advantage of the dramatic growth opportunities for its business in the future.

The ion exchange resins

The custom-designed products of Lanxess have the appearance of tiny plastic pellets, or beads, and their two most fundamental functions are separation and concentration. These beads are made up first of a polymer backbone, which serves as a stable foundation for the product. The surface of this polymer backbone is then chemically modified with the addition of functional groups which determine if it is a cationic exchange resin, an anionic exchange resin, a chelate resin or an adsorbent. These added functional groups work

like little tentacles which exchange or adsorb cations, anions or other molecules from a surrounding solution. The applications for this product are

manifold, and growing more important every day. These applications can be categorised according to industrial water treatment, consumer and food industries, specialties and future growth applications. Many of the uses from all of these categories, however, fall within the absolutely vital field of water purification, including water softening, demineralization and even decontamination of drinking or process water.

This can mean a simple household use, like softening hard water so that your washing machine will be protected from calcium build-up on the heat exchanger, thereby saving energy and extending the life of the machine. The water in drinking water systems can be drawn from rivers and then purified for consumption with the help of our resins. Or it can be used in important industrial processes that have stringent requirements for the purity of process water, like the ultrapure water that is used in producing semiconductors to clean the silicon wafers or in certain pharmaceutical applications.

Role of ion exchange resins in future growth

Ion exchange resins play a key role in four distinct mega-trends:

- Making more drinking water accessible to mankind
- Decontaminating surface, ground or wastewater
- Making the industrial mining of metals like copper, nickel, gold, silver and uranium both more efficient and environmentally friendly by means of a new resin-in-pulp technology
- Making it possible to produce biodiesel with greater resource efficiency





State-of-the-art facility in India

Lanxess is investing about EUR35mn in a new state-of-the-art facility in India to ensure that it's ready to take advantage of strong growth opportunities. The new production facility Lanxess is building in Gujarat, in northwestern India, is expected to allow, when it opens in 2010, to expand its production capacity dramatically while lowering the unit production costs. There will arise the newest, most state-of-the-art production facility in the ion exchange resins industry, using its full 20,000m³ capacity to produce resins on a truly global scale. This investment will create up to 200 new jobs and will take full



advantage of the many opportunities India has to offer. The new facility in India is going to provide the company with an unmatched production capacity, as well as giving us a major new presence in the Asian market when it opens less than two years from now.

Conclusion

While the wisdom about good things coming in small packages may apply to us right now, we do not expect to remain small for very much longer. The actual resin beads would not really work that well if you made them much larger than they are. But their impact is going to grow by leaps and bounds. One will certainly be hearing a great deal more about these amazing small beads in the years to come.

About Lanxess

Lanxess is a leader in specialty chemicals with sales in 2007 of EUR6.61bn and currently around 15,100 employees in 21 countries. The company is represented at 44 production sites worldwide. The core business of Lanxess is the development, manufacture and sale of plastics, rubber, intermediates and specialty chemicals.