Petroleum and Petrochemicals Economics Program: Petrochemical Market Dynamics

Styrenics 2012

Styrenics 2012 is one in a series of reports published annually as part of the Petroleum and Petrochemical Economics program.

This report provides an in-depth analysis and forecast of key polymer including:

- Styrene
- Polystyrene (GPPS/HIPS)
- Expandable Polystyrene (EPS)
- Acrylonitrile Butadiene Styrene (ABS)
- Styrene Butadiene Rubber (SBR)
- Other Styrene Derivatives

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Abstract

Styrene monomer is used in a broad range of polymer derivatives, ranging from commodity polymers to engineering plastics and synthetic rubber, namely polystyrene, expandable polystyrene (EPS), acrylonitrile butadiene styrene (ABS), styrene acrylonitrile (SAN), styrene butadiene rubber (SBR), styrene butadiene latex (SBL), and other copolymer resins.

Consumption recovered strongly following the global economic crisis, reaching 27 million tons in 2010. However, in 2011 and 2012 consumption stagnated as global demand growth was paralysed by economic problems and weakness in polystyrene applications.

The main derivative, polystyrene, has shown minimal growth since 2000 as a result of inter-polymer competition, consumer behaviour changes and technology development. In contrast, demand into EPS has accelerated at the highest rates, driven by protective packaging and construction sectors, and an increasing focus on energy conservation in buildings.

Asia Pacific is the largest styrene consumer in the world representing more than half of global styrene demand in 2012. Within the region, China is by far the main consumer, accounting for more than half of the regional demand, followed by South Korea, Taiwan, and Japan.

From 2012 to 2020, Asia Pacific will continue to drive styrene demand globally. Manufacturing competitiveness in China, India and other countries in Asia will enable them to benefit from the global growth in demand for many kinds of manufactured goods. Low-labour costs will support the region as a production hub for manufacturing goods for export to international markets. The increasing wealth and urbanisation in these countries will also continue to drive higher domestic consumption. The players in the styrenics business have continued to evolve with more joint ventures and rationalisations.

INEOS bought out NOVA from INEOS NOVA in February 2011 to form INEOS Styrenics and then proceeded with plans to merge with BASF's styrenics business. This joint venture, Styrolution, was finalized in October 2011. Styrolution includes all styrenics assets except EPS and some ABS plants.

In Japan, earlier consolidations that formed two joint ventures, PS Japan and Japan Polystyrene, proved insufficient, and several units have been closed. Mitsui Chemicals and Sumitomo Chemicals halted two polystyrene plants and dissolved their Japan Polystyrene joint venture in 2009. In 2012 Sumitomo sold its 40 percent stake in Chiba Styrene to Denka with Sumitomo focussing on styrene production at Nihon Oxirane Co. Denka now own 100 percent of Chiba Styrene and will focus production at this site and after shutting its 240 000 tons per year unit in May 2012. Mitsubishi sold its shares in PS Japan to its partners Asahi Kasei and Idemitsu Kosan and shut down its last styrene plant in 2010.

EPS ABS SB Rubber Global Average Others Polystyrene 0 5 10

Global Styrene Consumption Growth by Derivative

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Global subscriptions are available.

Customised subscriptions are available by product and/or geography.

Geographic segmentation includes:

- North America
- South America
- Western Europe
- Central and Eastern Europe
- Middle East and Africa
- Asia Pacific

Chapter's 3 to 8 are segmented by geography and further segmented into three main sections:

- Consumption: Assesses historic and forecast consumption; forecasts are based on projections of end-use and economic activity in each region.
- Supply: Includes a list of all producers, their production capacity, location, etc., and discussion of the status of new projects.
- Supply, Demand and Trade: Provides historical analysis and forecasts to 2030 of consumption, production, imports/exports, inventory build-up/decline, capacity and capacity utilisation for each region.

This analysis will identify the issues shaping the industry, as well as provide an independent appraisal of the market.

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