

# Synthetic Rubbers

Synthetic rubber is any type of artificially produced polymer material that acts as an elastomer or rubber. Elastomers are able to take much more deformation than most materials without permanent effects. The chemical properties of synthetic rubbers vary depending on the raw materials and methods used to make them. Synthetic rubbers are superior to the real thing in certain ways, including resistance to oil, heat, and ozone.



Sales Revenue

In KRW Billions

# 3,535.9

Synthetic Rubbers

# 54.8%

of total sales

Synthetic Resins

Other Businesses



### Main Products

SBR, BR, SSBR, NBR, HSR, Nd-BR, SB Latex, NBR Latex, SBS, SEBS, STE

### Key Applications

Tires, Shoes, Automobile Parts, Sporting Goods, Asphalt, Waterproof Sheet, Plastics

### Major Customers

Kumho Tires, Hankook Tire, Nexen Tire, Bridgestone Tire, Michelin Tires, Goodyear Tires, Continental Tires, Cooper Tires, Sumitomo Tires, Pirelli Tire, Styrolution Korea, LG Chem, Moorim Paper, Hankuk Paper, Kimberly Clark

# 2011 Review

Our synthetic rubbers business grew sales 58.3% to KRW 3,535.9 billion during the year, accounting for 54.8% of overall sales as it once again played a leading role in our record-setting performance. There were two primary factors behind these impressive results. First, our sales volume dramatically increased as a new 120,000-mtpy polybutadiene rubber (BR) line began commercial production in January. Second, while prices of butadiene (BD) feedstock rose, strong demand for synthetic rubbers from both tire and other manufacturers pushed up selling prices even higher, creating a favorable margin spread that boosted profitability.

With the ongoing expansion of our synthetic rubbers production capacity, securing a steady supply of BD feedstock has become one the key factors in the competitiveness of this business. Toward this end, we are increasing our self-supply ratio as we undertake a broad range of efforts to further strengthen our market leadership in this field. In March 2011, we signed an MOU with the JG Summit Petrochemical Corporation of the Philippines to establish a 50:50 joint venture to produce BD. Our Kumho Petrochemical R&BD Center in Daejeon is also actively involved in bringing new BD production processes to market.



# 2012 Outlook

Although the global auto industry has seen a slowdown due the ongoing Eurozone financial crisis, demand for replacement tires in China will continue to drive growth in the global tire market. The enforcement of a new EU tire labeling requirement is also expected to increase demand for eco-friendly tires, primarily in Europe and the United States. For these reasons, we expect to see continued growth in the synthetic rubbers industry. We also expect BD prices to stay strong as supply remains tight in Asia due to the startup of new SBR and BR producers as well as rising oil and naphtha prices.

Looking at the demand side, global synthetic rubbers makers are focusing investment on expanding production capacity in key Asian markets like China and India, together which account for a large portion of global demand, setting the stage for tougher competition. Keeping a close eye on these market developments, we are now flexibly shifting inventory and pricing policies to improve the profitability of our commodity BR and SBR products. We also plan to launch production at a new 60,000-mtpy SSBR production line at our Yeosu plant in response to demand for more eco-friendly tires with the introduction of a new tire labeling system in Europe in 2012, seizing the market initiative for this strategic product with aggressive marketing as we diversify our revenue base.

