Mitsui Chemicals to Newly Launch Metalloocene-catalyzed Performance PE Wax EXCEREX™

Already widely engaged in the manufacture and sale of polyethylene (PE) waxes used for applications such as processability improver for various resins, Japan’s leading chemical company Mitsui Chemicals (MCI) has decided to launch in October this year a new family of performance PE waxes under the EXCEREX™ trade name produced by using metallocene catalysts, the company announced today.

Construction of the new, 9,000-ton/yr EXCEREX™ manufacturing plant under MCI’s proprietary technology, which started in February this year at the company’s Iwakuni-Ohtake Works in western Japan, will be completed later this month, with commercial operation being scheduled to begin in October this year.

In the background of newly launching EXCEREX™ in the functional polymers product line-up this time is MCI’s strategic focus on further expansion and growth in the Performance Materials sector under the latest Medium-term Business Plan spanning Fiscal 2004 through 2007. The company’s Performance Materials sector consists of Functional Polymers, IT & Electronic Materials and Healthcare Materials businesses.

Aiming to play a leading role in shifting the company’s portfolio further toward high-revenue, high-profitability businesses, Functional Polymers has been engaged in R&D into creating new products leveraging MCI’s superior technological competency in catalysis science.

Made using a new production process based on metallocene catalysts, EXCEREX™ now permits meeting customer needs which have been difficult to fulfill with conventional Ziegler catalyst-type PE waxes, owing to its advantages such as lower melting point, lower molecular weight, greater hardness and introduction of functional groups.

Suitable for a wide range of applications such as processability improver/property modifier for commodity resins, engineering plastics and compounds, filler dispersant, oil-hardener, precision-casting mold material, printing & typing material and civil engineering/construction material, EXCEREX™ is expected to enjoy new, increasing market needs in Japan and the rest of the world.
In particular, owing to the introduction of functional groups, EXCEREX™ is being held in much expectation as a performance wax which permits new applications in combination with a whole variety of other materials.

A world pioneer in polymerization catalysis, MCI owns and operates in Iwakuni-Ohtake a production setup for a family of polyolefin-based waxes under the trade name Mitsui Hi-wax™, namely, a 11,000-ton/yr Ziegler catalyst-type PE wax plant and a 3,000-ton/yr PE wax/PP wax plant based on thermal decomposition. When the new EXCEREX™ unit begins commercial operation there in October this year, MCI’s combined wax production capacity is expected to reach a total of 23,000 ton/yr.

MCI intends to make renewed efforts toward accelerating its new product and applications development in order to nurture the Functional Polymers business as a mainstay of profitability aimed at a further expansion of the Performance Materials sector.