It started with shoes.

Korea’s shoe industry was growing during a period of industrial and economic development in the 1970s. And where there are shoe soles, there is a need for silica. The Belgium-headquartered Solvay Silica began its Korea operations in 1975 as a joint venture with a chemical company called OCI. Initial investment totaled KRW 12.989 billion (USD 11.2 million) and a plant was established in Incheon.

Today, the entity is called Rhodia Silica Korea and is one of the largest producers of precipitated silica in Asia. In 1996, the France-headquartered Rhodia acquired OCI’s stake in the joint venture. Chemical maker Solvay group acquired Rhodia in 2011, and Rhodia Silica Korea is now part of the Solvay Silica business unit and one of Solvay’s eight subsidiaries in Korea.

Rhodia Silica Korea produces, exports and conducts research and development for precipitated silica, which is widely used as a reinforcing filler in the tire and elastomer industry, as an active ingredient carrier in animal nutrition and as an abrasive and thickening agent in toothpaste. In other words, be it for our shoes or animal feed, precipitated silica touches all aspects of our everyday lives.

With two production lines, the company manufactures 65,000 tons of precipitated silica, including highly dispersible silica (HDS), a year. Demand for the material in Korea continues to grow, especially when it comes to “green tires.”

“If they use our silica product, they can save energy, from 5 percent to 7 percent,” said Jin-Chul Kim, Representative Director of Rhodia Silica Korea, about manufacturers of environmentally friendly tires. “So it is a huge contribution for fuel consumption, energy saving, emission saving.”

The use of HDS in the manufacturing of tires reduces rolling resistance by 25 percent, lowering carbon emissions by 5-7 percent. Also, with premium-grade silica, the fuel efficiency of a car can be improved up to 10 percent and carbon emissions reduced at the same rate.

Major customers for Rhodia Silica Korea include Michelin, Goodyear, Kumho and Hankook Tire. With USD 11 million in capital, the company recorded turnover of USD 70 million in 2012. HDS produced by Solvay Silica globally accounts for more than 63 percent of the market share. With the growing tire market in Korea and demand for HDS in the tire segment forecast to increase four or five-fold globally by 2025, the company is now considering whether to establish its 10th factory in Korea or Thailand.

“All of Solvay continues watching Korea, but it depends on the market,” said Kim. “Our case depended on shoes. Now we depend on the market for tires... The Korean market is not big enough, but a major role has to be done by Korea.”

Having been in Incheon now for almost 40 years, Rhodia Silica Korea is one of the highest tax contributors of its community, said Kim. The company is also committed to fulfilling its corporate social responsibility and has carried out numerous volunteer programs over the years. As chairman of the Incheon Korea Engineer Club, Kim has also led efforts to help the students of engineering high schools find jobs.

“The main purpose of this, as you can see, all of the young generation wants to go for [being a] lawyer, doctor and so on, so we couldn’t have good quality people in engineer field, and they are very much disappointed with engineer jobs,” said Kim. “In order to give pride to the engineer job, we arrange this kind of service to the engineers.”

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- There are more than 50 different silica products and two families of silica: highly dispersible silica and conventional silica.
- Rhodia Silica Korea was awarded the Grand Prize for Best Labor-Management Relationship Company by the City of Incheon in 2010 and 2011.