Review of Operations

PVC is used in window frames due to its superior heat insulation capabilities.

Organic and Inorganic Chemicals

Net Sales of Main Products

(Billions of yen)

	2010	2009	2008
Polyvinyl chloride (PVC)	242.7	324.9	363.7
Silicones	155.6	171.8	199.7
Cellulose derivatives and others	110.7	132.5	137.6
Total	509.0	629.2	701.0
Assets	754.0	698.1	782.9
Depreciation	33.4	34.7	31.7
Capital Expenditures	94.6	82.0	116.4

Polyvinyl Chloride (PVC)

PVC is a commodity plastic resin having superior properties and processability, as well as economic advantages. Life-cycle assessment shows major environmental benefits, too: Manufacturing PVC requires less petroleum resources than making other plastics, and PVC recycling is also progressing.

PVC is used in a variety of fields including essential public infrastructure such as water and sewage pipes and electrical wires, in many vital medical appliances such as tubing and valves, as well as in construction materials. Recently, a growing number of households in Japan are using PVC window frames due to their superior insulation performance, seasonally reducing costs of both heating and cooling of homes and contributing to reduction of global warming via reduced energy needs.

Shin-Etsu is now further expanding the PVC production capacity of our United States subsidiary Shintech Inc. in the state of Louisiana.

Shintech Inc. will continue to be the flagship of the Shin-Etsu Group's PVC businesses, which we manage in a trilateral structure that includes manufacturing bases in Europe and Japan.

Silicones

Silicones combine organic and inorganic properties and can be produced in various physical forms, such as fluid, resin or rubber. Their numerous unique properties include electrical insulation, as well as heat, cold and weather resistance. We currently provide more than 4,000 different kinds of silicone products for applications that contribute to improved functionality of products, rationalization and increased efficiency of production processes in a wide range of fields such as the electrical, electronics, automotive, construction, cosmetics, toiletries and chemical industries.

The Shin-Etsu Group will continue to aggressively expand production and sales of silicones in Japan and overseas, especially in China where the market is growing rapidly. We will also continue to focus on developing new products and new applications.

The superior adhesiveness, durability and deep hardening qualities of silicone-based, elastic joint sealing material make it effective for aquariums and other large-size water tanks.

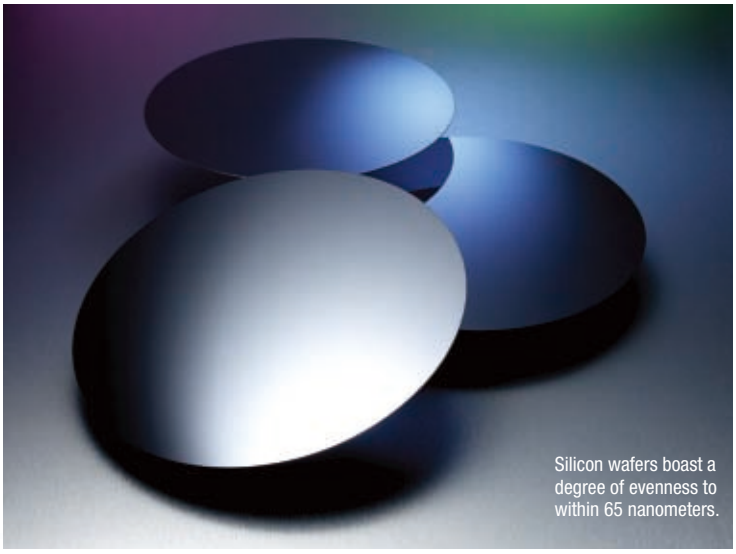
Cellulose Derivatives

Cellulose derivatives are an environmentally friendly material made from a natural polymer. Shin-Etsu has developed a wide array of cellulose derivative products that are used in diverse fields such as pharmaceutical coatings and binders for tablets and granules, construction, civil engineering, agriculture, fine ceramics, paper processing, foods and toiletries.

In addition to the Naoetsu Plant in Japan, construction is currently progressing on pharmaceutical cellulose production facilities at SE Tylose GmbH & Co. KG in Germany in order to stabilize supply by establishing multiple production bases. We are also working to develop overseas markets.

Synthetic Pheromones

Synthetic pheromones disrupt insect mating behaviors and, as a result, suppress the population of the next generation. In Europe and North America, they are widely used in fruit orchards, such as apple, peach and grape. In Japan, they are used mainly in fruit orchards as well as in vegetable fields, such as cabbage, and in tea fields. Mating disruption is gaining wider attention as an alternative technique to insecticides, and Shin-Etsu will continue to expand sales worldwide.



Silicon wafers boast a degree of evenness to within 65 nanometers.

Electronics Materials

Net Sales of Main Products

(Billions of yen)

	2010	2009	2008
Semiconductor silicon	254.5	404.9	482.8
Others	62.6	62.6	81.9
Total	317.1	467.5	564.7
Assets	624.9	607.2	713.0
Depreciation	47.4	75.8	101.0
Capital Expenditures	22.0	71.3	144.1

Semiconductor Silicon

Demand for semiconductor devices is expanding due to the widening range of applications in such products as personal computers, mobile phones, digital appliances and automobiles. The Shin-Etsu Group is responding to customer demand by shipping silicon wafers to users worldwide from its production bases in Japan, Malaysia, the United States, the United Kingdom and Taiwan.

The Shin-Etsu Group is the world's top silicon wafer supplier, with a worldwide market share of approximately one third. We meet all customer needs through leading cutting-edge technologies and by establishing the framework for stable supply.

As for 300mm wafers, the Group is going forward with mass production at its production sites in Japan and the United States. In the future, the Group will apply its collective strength to fulfill its duties as the world's top supplier by accurately grasping market trends and maintaining its framework for promptly increasing capacity to meet demand.

The Group is focusing on expanding sales of wafers used for applications in power semiconductors, which are increasingly utilized for energy reduction, and in highly functional devices. The Group is also working to strengthen competitiveness through product quality differentiation.

Rare-Earth Magnets for the Electronics Industry

The Shin-Etsu Group has the largest global market share for rare-earth magnets for voice coil motors (VCM), which are used for hard disk drives (HDD) used in computers, servers and audiovisual-recording devices.

The Shin-Etsu Group is the only manufacturer in the world to carry out integrated production of high-quality rare-earth magnets starting from high-purity rare earth. Beginning with material development, the Shin-Etsu Group then uses its ability to quickly adapt in moving from prototype to commercial production to respond to customer needs, providing a stable supply of products, developing products that meet application requirements and maintaining thorough quality control.

Photoresists and Other Products

The Shin-Etsu Group has established a framework to supply the principal materials needed for the lithography process in semi-conductor manufacturing. We have leveraged our close connections with the semiconductor industry to develop, commercially produce and market photoresists for KrF (krypton fluoride) and ArF (argon fluoride) excimer lasers as a photo-sensitive material used in printing semiconductor circuits, I-line resists, and the dust protective covers called pellicles, used for photomasks with excimer laser lithography.

Although Shin-Etsu entered the photoresist market last, it is now the leading photoresist manufacturer in the world, with a share of around one-third of the market due to the Company's detailed response to customers' technological innovations and widespread client trust.

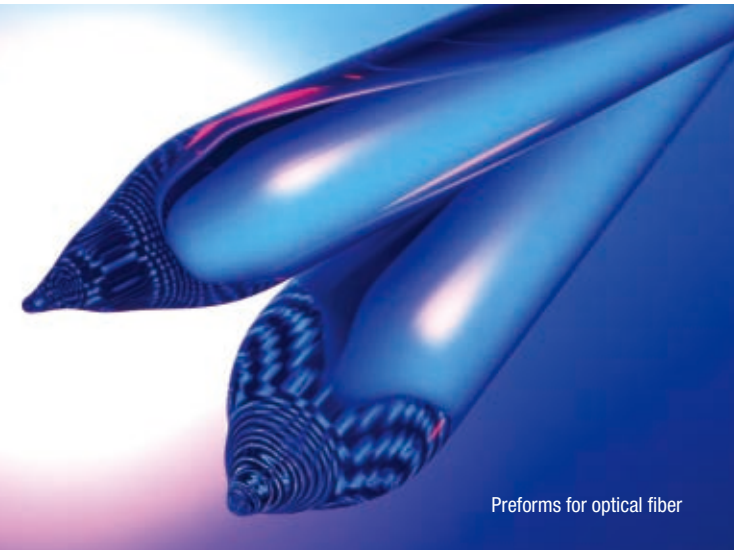
Shin-Etsu will strengthen development to reinforce its position as a top semiconductor materials manufacturer and source of the most advanced photomask blanks.

Epoxy Molding Compounds

Based on cutting-edge technology accumulated through the development of various silicone products, the Shin-Etsu Group has provided a succession of unique products that are differentiated from those of other companies. These include Green EMC products with improved flame-retardance that respond to environmental requirements, and liquid epoxy resins.

The Group has recently focused on expanding sales of products that meet the needs of the rapidly growing LED market by developing silicone molding materials and reflectors to meet the heat resistance requirements of high-brightness LEDs.

Shin-Etsu's LED reflector materials are indispensable to enhancing LED brightness.



Preforms for optical fiber

Functional Materials and Others

Net Sales of Main Products

(Billions of yen)

	2010	2009	2008
Synthetic quartz products	23.4	25.8	29.6
Rare earths and rare-earth magnets, etc.	30.3	36.9	37.4
Others	37.0	41.4	43.7
Total	90.7	104.1	110.7
Assets	183.1	172.5	199.5
Depreciation	7.1	9.2	8.9
Capital Expenditures	8.7	6.6	8.6

Synthetic Quartz Products

With silicon metal refined to a high degree of purification as a raw material, the Shin-Etsu Group is mass producing high-purity synthetic quartz, which is extremely high in purity compared to natural quartz.

The Group supplies synthetic quartz products such as preforms for optical fiber, LSI photomask substrates, and large-size photomask substrates for LCDs, which are indispensable materials for the IT industry.

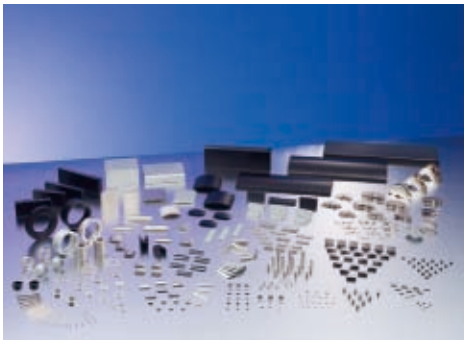
The Shin-Etsu Group is committed to differentiation through quality and will work to ensure a proper response to demand trends for optical fiber preforms and large-size photomask substrates for LCD panels to prepare for the further development of the high-level information society.

Rare Earths and Rare-Earth Magnets for General Industrial Use

The Shin-Etsu Group uses high-level separation and refining technologies and physical property control technologies to commercially produce rare-earth materials for a wide range of applications in such products as plasma display panels, LCD TVs, LEDs and fluorescent materials.

By maximizing strong magnetic force, the Group's rare-earth magnets for general industrial use contribute to the introduction of products that are lighter in weight, smaller in size, and higher in output for equipment such as motors.

The magnetic force of the Group's rare-earth magnet products is among the strongest in the world. This feature has gained us a high degree of trust from customers for a wide range of applications in such product areas as energy-efficient air conditioners and other home appliances, and various motors for automobiles. In addition, the use of rare-earth magnets is expanding in such energy-saving and environmentally friendly applications as motors for hybrid cars and wind-power generators.



A variety of rare-earth magnets

Liquid Fluoroelastomer SHIN-ETSU SIFEL®

SHIN-ETSU SIFEL® is a liquid fluoroelastomer that Shin-Etsu was the first in the world to develop. Its form before hardening is either a liquid or a paste, and after heat curing, it becomes a flexible synthetic rubber material. SHIN-ETSU SIFEL® has superior resistance to cold, keeping its elasticity even at minus 50ºC. In addition, it has such desirable characteristics as resistance to oils, solvents, chemicals and heat as well as excellent electrical insulation properties. Accordingly, it is used as a molding material, an adhesive, a coating and a potting material in a wide range of application fields including the automotive, aircraft, electric, electronics, office equipment and petrochemical industries.

Other Products

Shin-Etsu's flexible copper-clad laminates (FCLs) are used as materials for printed circuit boards in such electronic products as mobile phones and digital cameras and are contributing to making these products lighter and more compact. Shin-Etsu developed and started marketing original two-layer FCLs and a halogen-free cover layer with excellent properties.

Shin-Etsu Engineering Co., Ltd. consists of the Plant Division and the Electro-Mechanics Division. Both divisions contribute to expanding and automating the Shin-Etsu Group's investment projects and receive a large number of orders from companies outside of the Group. Shin-Etsu Engineering also supplies alignment machines for panel production of LCDs.