Overview of High Value-added Products

Positioning chemicals for special fibers, chemicals for special electronic parts, lubricating oil additives, permanent antistatic agents, and medical and pharmaceutical products, which contribute to carbon neutrality and improved QOL, as high value-added products, we actively conduct capital investment and work to expand sales. Due to the worse-than-expected deterioration of the business environment, it has become difficult to achieve the operating profit target of 7.9 billion yen for FY2025 for high value-added products set out in the MTP 2025. However, with steadily increasing profits, we will actively expand sales in Japan and abroad while creating new high value-added products.

Our approach to reducing CO₂ emissions through products contributing to carbon neutrality and the sales ratio of ecofriendly products and QOL-related products are posted on our sustainability website.

▶ Operating profit / operating profit ratio for high value-added products





Created based on the IFA's

World Energy Outlook 2024"

2050

(vear)

Business overview

Chemicals for special fibers



Our chemicals for special fibers are mainly used for carbon fibers. Composite materials using carbon fibers are used in a variety of applications, such as wind power generation, automobiles, and aircraft, and demand for windmill blades is expanding worldwide due to the spread of renewable energy. They contribute to the use of renewable energy, industrial development, and climate change countermeasures.

Overview of FY2024 and market forecast

In FY2024, demand for our chemicals for carbon fibers was temporarily sluggish due to factors such as the aggressive expansion of emerging Chinese carbon fiber manufacturers, resulting in performance below expectations despite a recovery compared to FY2023.

The overall carbon fiber market is seeing growing demand for windmill blades and aircraft as well as expanded applications for tanks for hydrogen, which is expected to be the next generation energy source, and continued market growth is expected.

In FY2024, sales of electrolytes for aluminum electrolytic capacitors were weak due to the sluggish EV market despite increased demand caused by the rapid expansion of the Al-related market. Meanwhile, the overall capacitor market is expected to grow, driven by the increasing sophistication of electronic devices, in addition to an increase in automotive electrical parts, such as driving assistance

system circuits, due to the electrification of automobiles, including EVs.

▶ Future forecast of power sources

60

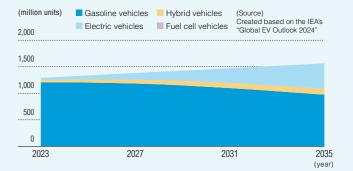
(thousand TWh) Solar PV Wind Hydropower

Other renewables Nuclear

Coal Natural gas Othe

Other low-emission power sources

▶ Future forecast for automobiles by engine type



Chemicals for special electronic parts



Lubricating oil additives

Chemicals for special electronic parts are mainly used in electrolytes for aluminum electrolytic capacitors, which are used in a wide range of applications, from general electronic devices to important electronic parts that support social infrastructure. Our electrolytes for aluminum electrolytic capacitors are a world-class, long-selling product used in capacitors that require high reliability, such as automotive control units.

In the automobile industry, the need for fuel-efficient gasoline vehicles is increasing in parallel In FY2024, although the automobile industry was affected by certificawith the trend toward electrification. Since our lubricating oil additives are highly effective in tion issues, sales of our lubricating oil additives remained steady due to increased demand. improving fuel efficiency, they are used in engine oils for gasoline vehicles, hybrid vehicles,

The automobile market is expected to see gradual progress in electrification to reduce CO2 emissions, with gasoline vehicles being replaced by EVs and PHVs. As for lubricating oil additives, demand is expected to remain strong due to the growing need for fuel efficiency and new applications such as for EV drive engines.

Permanent antistatic agents



Permanent antistatic agents are used in a wide range of applications to prevent various problems caused by static electricity (destruction of electronic circuits, malfunction of electrical appliances, adhesion of dust, etc.) and accidents (fires, explosions, etc.) Demand has recently increased mainly for semiconductor carrier trays and packaging for electronic devices and precision parts, and applications are also expanding to include explosion-proof applications. We will develop new applications for these unique, highly-functional products.

and plug-in hybrid vehicles (PHVs). It is assumed that their replacement demand at the time

of after-sales maintenance will increase. With the aim of improving fuel efficiency in EVs, we

are also developing lubricating oil additives optimized for EVs.

Sales of permanent antistatic agents in FY2024 were strong due to a recovery in demand related to semiconductors and electronic parts.

The semiconductor market is expected to grow due to increased investment in data centers in line with the development of AI, as well as rising demand for semiconductors due to an increase in Al-equipped devices.

▶ Semiconductor market forecast (million USD) Total Discrete Optoelectronics Sensor & Actuator Total IC 600.000 2019 2020 2021 2022 2023 2024 (forecast) (forecast)

Created based on JEITA's World Semiconductor Trade Statistics "Semiconductor Market Forecast Spring 2025"

Medical and pharmaceutical products

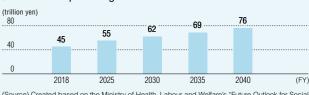


Our medical and pharmaceutical products mainly include polyethylene glycol for pharmaceuticals and non-absorbable topical hemostatic materials for the central circulatory system. The former is used as a pharmaceutical additive in a base material for ointment, a suppository base, and tablet coating agents. It is also used as the active pharmaceutical ingredient in cleaning agents for the digestive tract. Other applications include tissue regeneration and cell culture. Made of polyurethane, the latter is used in vascular surgery to stop bleeding at anastomosis for all blood vessels except for cerebral vessels.

In FY2024, medical and pharmaceutical products performed well (trillion yen)

mainly due to increased demand for colonoscopy applications. The aging of the global population is expected to continue, and the market for medical and pharmaceutical products that support the extension of healthy life expectancy is expected to expand

▶ Medical expenses growth forecast



(Source) Created based on the Ministry of Health, Labour and Welfare's "Future Outlook for Social Security in Anticipation of 2040

Sanyo's Contribution | Supporting the Environment

Sanyo Chemical Group Integrated Report 2025

Sanyo's Contribution | Supporting People and Their Lives

>