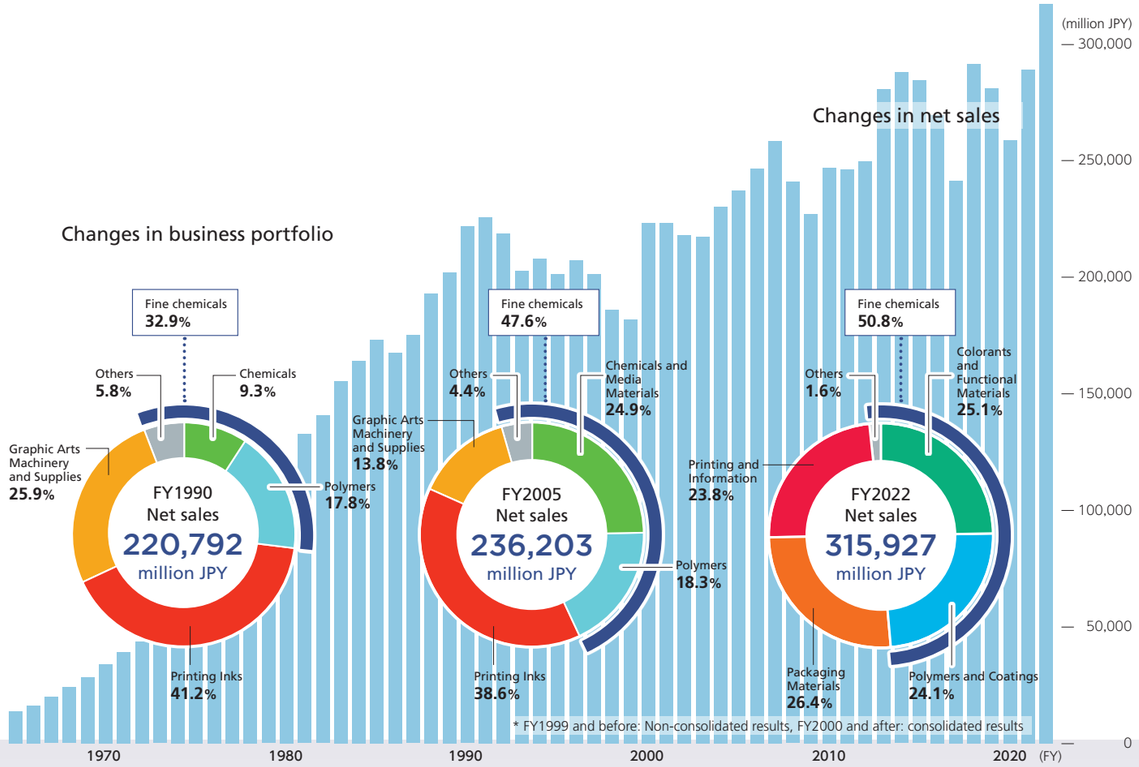
History of the Toyo Ink Group

Over the more than 120 years since its foundation, the Toyo Ink Group has continued to grow by responding flexibly to the changing conditions and demands of society. During each era the Group experienced, we made major decisions on strategy and persistently and tirelessly implemented them, enabling the Group to be what it is today. We will continue to pass down our intent to "contribute to the enrichment of life and culture of people worldwide," which is a part of our corporate DNA, to realize a sustainable society.

For high-quality domestic printing inks that help the spread of learning and education

Kamataro Kobayashi moved from Yokohama to Tokyo when he was 11 years old. After apprenticing for a sign maker and working as a clerk at an art supply store, he became independent and opened a printing ink shop in Nihombashi, Tokyo in 1896. Kamataro could not attended school since his early childhood and remained illiterate throughout life. Therefore, he believed that learning and education are the most important factors for the development of Japan, and established Toyo Ink Manufacturing Co., Ltd. in January 1907, with the goal of domestically producing and improving the quality of printing inks for books and textbooks, which are necessary for learning and education.

Founder **Kamataro Kobayashi** (1875 - 1938)



1896—

Establishment of *Kobayashi* & Co.

Having witnessed the significant progress that was occurring at the time in color printing technologies, Kamataro established a printing ink shop, in 1896. In those days, most printing business operators did not purchase inks as finished products. They bought raw materials, such as pigments and varnishes (resins for inks,) and custom-mixed them to produce original inks. In response, Kamataro began providing a custom-mixed ink service as an outsourcing service for small- and medium-sized business operators who did not have the staff to dedicate to making inks. Later, Kobayashi & Co. grew to the scale of manufacturing and selling finished inks, but Kamataro faced a barrier: expensive imported raw materials were indispensable for the manufacturing of high-quality inks. And this barrier led Kamataro toward a new dream, the realization of the in-house production of raw materials.

Ink color sample sheets used by Kobayashi & Co.

1907—

Toward the integrated production of inks made in Japan

Kamataro established the first stock company in the ink industry in 1907 and began researching the in-house production of pigments and varnishes, the raw materials of inks, with the goal of producing high quality inks that were fully made in Japan. Catalyzed by the difficulty of procuring organic colorants during the First World War, he accelerated R&D efforts. In 1920, Toyo Ink Manufacturing succeeded in the in-house production of azo pigments such as Brilliant Carmine 3B, which excel in color development and durability, and started mass production. Then, in 1937, the company succeeded in the in-house production of Phthalocyanine Blue, which later became a flagship pigment product from the Toyo Ink Group. In this way, Toyo Ink Manufacturing acquired the technological capabilities to support integrated production ranging from materials to printing inks and developed into a leading ink manufacturer in Japan.

Head office of Toyo Ink Manufacturing Co., Ltd. in its early days (around 1910)

1950—

From an ink manufacturer to a chemical manufacturer

In 1951, Toyo Ink Manufacturing entered into a technological tie-up with Interchemical Corporation (now known as BASF SE,) which was the largest chemical company in the United States, and introduced synthetic resin technologies. This resulted in the creation of a synthetic resin-based ink featuring excellent colors, gloss, and durability that were unachievable with conventional inks. In addition, the company also acquired technologies for pigment textile printing agents, metal coating agents, adhesives, and pressure sensitive adhesives, and other technologies, and entered a new business with polymer materials beyond printing inks. The company was also proactively developing applications for new products and evolved as a chemical manufacturer providing a wide variety of products, including coating agents for beverage cans, plastic colorants, double-sided tapes for industrial use, and resist inks for printed circuit boards.

"ORIBAIN™," Pressure sensitive adhesive

"DOUBLE-FACE™," Double-sided adhesive tape

1960—

Expansion and growth into a global company

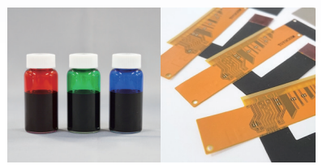
In 1961, in parallel with its growth in the domestic market, the company established an overseas representative office in Hong Kong, with the goal of full-scale product exports to China and Southeast Asia. In 1963, the first overseas subsidiary after WWII was established in Hong Kong as a joint venture with Interchemical Corporation, and built sites in Singapore and Malaysia. In the 1970s, the company established sites in South Korea, Thailand, Belgium, and the United States. In the 1980s, it quickly increased its sites in China and Southeast Asian countries, building a foundation for the global management of the Toyo Ink Group. Since the 2000s, the Toyo Ink Group has been expanding into emerging markets such as India, the Middle East, Turkey, and Central and South America, and building a global supply system based on local production for local consumption.

Toyo Ink (Thailand) Co., Ltd. (Established 1971)

1990—

Expanding into new markets mainly leveraging the company's own technologies

Since the 1990s, the company has been advancing R&D activities to create applications for its own technologies used in existing products, such as printing inks, adhesives, coatings, and plastic colorants, in new industrial fields. The company evolved its technologies to add functionality, based on the electronic and optical properties of organic pigments and polymers, the film structure control technologies of printing and coating, and the dispersion control technologies used for the development of adhesives and colorants, then the company developed and sold materials such as organic colorants for OPC drum, conductive inks, resists for FPD color filter, and electromagnetic wave shielding films for new markets for the Toyo Ink Group, including electronics, displays, telecommunication, automobiles, and solar cells.



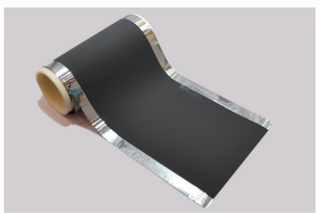
"Liocure™," Color resist for FPD

"LIOELM™ TSS," Electromagnetic wave shielding film

2010—

Taking on challenges to realize a sustainable society

The Toyo Ink Group, which adopted a holding company system in 2011, has been developing advanced products for new markets as a material chemical company, taking on challenges to realize a sustainable society. This has led to a wide array of achievements, including printing inks and adhesives made from biomass raw materials, seal materials that improve the efficiency and life of solar cells, and carbon nanotube (CNT) electrode materials for lithium ion batteries. In the medical field, we are also focusing on solutions for healthcare professionals and materials related to drug discovery, with a focus on the transdermal patches business. In its SIC27 long-term corporate vision, which began in 2018, the Toyo Ink Group set the task of reforming its corporate infrastructure to achieve sustainable growth together with society looking 100 years ahead.



"LIOACCUM™," Electrode material for lithium ion batteries