

CORPORATE
PROFILE



カクシン

From an Innovative Japanese Chemical Company

Innovating the future through chemistry.

We are a pioneer of chemical innovation that continues to go forward and forward.

In order to live a more affluent life, our ancestors came up with tools and developed them as science in the midst of the harsh forces of nature over a long period of history.

We human beings will continue to take steps toward further development of science in the future.

As a pioneer of chemical innovation, we will continue to pursue research and development of earth-friendly chemistry and take steps toward harmonization between technologies, humans and nature.

The mission of ISK is to produce new products in order to produce earth-friendly environments.

We aim to innovate the future of the world with the power of chemistry by taking advantage of the technical capabilities we have cultivated in the world of chemistry, in order to realize a social environment where all people can live a better life.

Inorganic Chemicals

Organic Chemicals

White Color

Environment

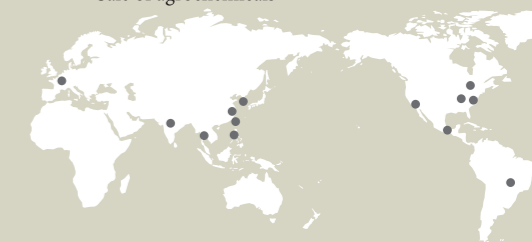
Agriculture

Medicine

Group Companies

- Consolidated subsidiary company ■ Equity method affiliated company
- Non-consolidated subsidiary company ■ Non-equity method affiliated company

- [Belgium] ■ ISK BIOSCIENCES EUROPE N.V.
Administration of agrochemicals business in Europe; manufacture and sale of agrochemicals
- CERTIS BELCHIM B.V.
Sale of agricultural materials
- [U.S.A.] ■ ISK AMERICAS INCORPORATED
Administration of U.S. subsidiaries
- ISK BIOSCIENCES CORPORATION
Administration of agrochemicals business in Americas; manufacture and sale of agrochemicals
- ISK BIOCIDES, INC.
Sale of wood preservative
- IBC MANUFACTURING COMPANY
Manufacture of wood preservative and agrochemicals
- ISK ANIMAL HEALTH, LLC
Manufacture and sales support of animal health products
- ISHIHARA CORPORATION (U.S.A.)
Sale of inorganic chemical products
- SUMMIT AGRO USA, LLC
Sale of agricultural materials and manufacture of agrochemicals
- [Mexico] ■ ISK BIOSCIENCES, S.A. DE C.V.
Registration and sale of agrochemicals
- [Brazil] ■ ISK BIOSCIENCES DO BRASIL DEFENSIVOS AGRICOLAS LTDA.
Agrochemical registration and market development in Brazil
- [Taiwan] ■ ISK TAIWAN CO., LTD.
Sale of inorganic chemical products
- [Korea] ■ ISK KOREA CORPORATION
Sale of inorganic chemical products
- ISK BIOSCIENCES KOREA LTD.
Sale of organic chemical products
- [Thailand] ■ ISK BIOSCIENCES (THAILAND) LTD.
Agrochemical registration and market development in Thailand
- [India] ■ ISK BIOSCIENCES INDIA PVT. LTD.
Agrochemical registration and market development in India
- [China] ■ ZHEJIANG ISK & TAURUS CHEMICAL CO., LTD.
Sale of organic chemical products
- ISK (SHANGHAI) CHEMICAL CO., LTD.
Sale of organic chemical products
- [Philippines] ■ AVC CHEMICAL CORP.
Sale of agrochemicals



- [Japan] ■ ISK BIOSCIENCES K.K.
Sale of agrochemicals
- ISHIHARA TECHNO CORPORATION
Trade in organic and inorganic chemical products
- FUJI TITANIUM INDUSTRY CO., LTD.
Manufacture and sale of titanium dioxide, electronic materials, etc.
- ISK ENGINEERING PARTNERS CORPORATION
Construction
- ISHIHARA SANSO KAISHA, LTD.
Manufacture and sale of industrial gases
- ISHIHARA KOSAN CO., LTD.
Asset management
- GENOMIDEA INC.
Asset management
- HOKUSAN CO., LTD.
Manufacture and sale of agrochemicals

Innovating to brighten people's lives with "white."

Creating "white color" to brighten everyday life

Many of the white objects that you see in everyday life—cars and planes, washing machines and air conditioners, wallpaper and exterior house walls—owe their white color to titanium dioxide from ISK.

Our innovative titanium dioxide technology also plays an important role in electronic components, the decomposition of organic pollutants, and the purification of contaminated soil.



Coloring with "White" from Consumer Goods to Large Buildings

Titanium Dioxide | ISK is the only dual-process holder in Japan in supplying "white" globally. In addition to the sulfate process, ISK also employs the chloride process that generates smaller amount of industrial wastes but requires higher technology.



TIPAQUE

Our TIPAQUE occupies the largest market share in Japan and is also popular around the world. It is the leading brand in the titanium dioxide market with its high-quality white color, excellent hiding power, and high tinting strength on resins.



TIPAQUE Yellow

Featuring high levels of safety, weather resistance, thermal resistance, and chemical resistance, our yellow pigments are used in various applications including paints and plastics.

Offering Comforts in Various Occasions

Functional Materials | With its proprietary technologies including ultrafine particle synthesis and surface treatment, besides its use as white pigments, ISK is diversifying the applications of titanium dioxide for better living environment.



Electro-conductive Materials

Major applications of ISK's electro-conductive products are floor coatings for clean rooms where anti-dust and anti-static properties are required, and conductive coatings for resin bumpers of automobiles to enable electrostatic coatings.



High-purity Titanium Dioxide

We offer high-purity titanium dioxide, an ideal material for electroceramics.

Realizing superior texture.

Matting agents | These products mitigate physical issues hindering the use of matting paints, such as weather resistance and coating preservation, and help improve design characteristics.



Matting agents

These matting paint agents combine a high matting effect (gloss suppression) with excellent weather resistance. The finished coat is smooth to the touch. There is a white type with both opacity and whiteness, and a non-colored type for dark colors.

Creating pleasant, eco-friendly spaces

Heat Shield Materials | We help create pleasant living environments and contribute to reduced carbon emissions and energy savings.



Heat Shield Materials

Our white, black, and transparent inorganic materials provide heat shielding in the near infrared to infrared light spectrum, and are used in paints and plastics that require heat shielding.

Protecting the Soil, Water and Natural Environment

Environmental Products | ISK contributes to the maintenance and regeneration of essential natural environmental resources, including soil and water, by providing soil improvement agents and environmental cleaning materials developed by ISK's proprietary ultrafine particle and functionality enhancement techniques.



Soil and Water Pollution Control

The heavy metal insolubilizers prevent the spread of pollution by absorbing and insolubilizing heavy metals contained in soil and groundwater. The VOC decomposers purify contaminated soil and water by decomposing volatile organic compounds. Both products contribute to the reduction of environmental pollution.



Recycling Soft Soil

Gypsum-based soil improvement agents reform sludge and soft soil at construction sites into a state safe for and friendly to creatures more rapidly, contributing to soil recycling.

Innovations in food, health and color.

Enriching food. Promoting healthier living. Making the ordinary extraordinary.

We are relentlessly pursuing research and development to help people enjoy better food, health, and lifestyles each and every day.

Our agrochemicals, which ensure a safe and stable supply of all kinds of food, and our pharmaceuticals, which accelerate the evolution of medicine, go hand-in-hand with food and health.

What is more, we deliver one-of-a-kind flower color that blossoms with our biotechnology.

Ishihara Sangyo continues to support the world by bringing innovation to these fields with its unique technologies.

Agrochemicals

Capitalizing on our world-class technical skills cultivated for more than half a century, we have gained high reputation worldwide by developing agrochemicals with high safety and low environmental loads.

Animal Health Products

We discover, develop, manufacture and commercialize the innovative veterinary drugs to protect the lives and the health of pets.

Blue moth orchid

After more than 15 years of research and development, we became the first in the world to create a moth orchid with a natural blue color.

Pharmaceuticals

Utilizing organic synthesis technologies cultivated in agrochemical development, we continue to expand into new business areas—developing, manufacturing and selling drug substances that become pharmaceutical active ingredients and organic intermediates that are the raw materials of drugs.

Supporting the Stable Supply of Agricultural Products

Agrochemicals | Since the introduction of herbicide from overseas about 70 years ago, we have been a pioneer in the Japanese agrochemical industry—providing agrochemicals that are friendly to humans and the environment with world-class development capabilities to support stable supply of agricultural products to consumers around the world.



Herbicides

Our herbicides, safe for humans/mammals and environmentally friendly, are widely used in paddies and upland field and have been contributing to safe and sustainable food production.



Fungicides

Our highly original-agents have safety profiles to the environment, animals and human and are widely used as main control agents for fungal disease caused by oomycetes, ascomycetes, etc.



Insecticides and Nematicides

We offer unique agents—broad-spectrum insecticides and insecticides highly effective against aphids and other sucking insects, as well as nematicides that can control pests in the soil and on the ground.



Biopesticides

Our natural enemy biological products eliminate spider mites and other microorganisms, and our microbial products control sclerotium rot. The use of chemical pesticides can be reduced by using these biological insecticides in combination with control technologies that have low impact on them, thereby lightening environmental impact.

Protecting the Health of Pets

Animal Health Products | We aim to protect pets from diseases, and provide new drugs and reliable services to pet owners.



Anti-Pancreatitis Drug for Dogs

We domestically manufacture and sell BRENDA™, the world's first anti-pancreatitis agent for dogs, as well as supplying the drug substance for this product to the company we jointly developed the product. In the United States and Europe, we are working independently to obtain approval of the final product of the agent for commercialization. Our goal is to provide superior products that meet the needs of pet owners and animal health workers.

Contributing to a more fulfilling life

Blue moth orchid | Blue Gene®, which we successfully developed after overcoming many difficulties, will help enriched people's lives by providing value that will never fade away as a gift for loved ones, for celebrations, and for various other occasions.



Blue Gene®

By introducing the blue gene of the Asiatic dayflower into the moth orchid, which has no blue pigment, we have achieved a graceful flower color that is unlike any other variety to date.

Contributing to Advancements in Medicine

Pharmaceuticals | Our active pharmaceutical ingredients and organic intermediates provide the basis for pharmaceutical development. All are highly acclaimed both in Japan and overseas. We are playing an important role in the pharmaceutical field to maintain people's health.



Organic Intermediates

Our organic intermediates and synthesis technologies are contributing to the development of new medicines including CF3-pyridine derivatives, which significantly help pharmaceuticals exhibit physiological activities.



Active Pharmaceutical Ingredients

Utilizing technologies developed in the agrochemicals business, we produce high-quality active pharmaceutical ingredients at a factory compliant with Good Manufacturing Practices (GMP) and ensure stable supplies to pharmaceutical companies in Japan.

World's Most Advanced Development Capability

One-of-a-kind products with human-earth friendly technology

The strengths of all our products that are globally valued in both inorganic and organic fields are high added value based on our own technological development capabilities cultivated since our foundation.

We look ahead the future, establish a research and development system that proactively challenges new fields, and continue to create one-of-a-kind products with our innovative technologies that are friendly to people and the earth.

Reliable Safety and Quality Production

Our world-class manufacturing system makes products that support the world today.

The Yokkaichi Plant is a manufacturing center for titanium dioxide and many other products. On a 70-hectare land site (173 acres) stand wastewater treatment facilities with a 200,000-ton daily capacity as part of a world-class manufacturing system that features strong environmental management and quality management. The stable supply of safe, high-quality products supports the world today.

Inorganic Chemicals Division



R&D Institute (Yokkaichi)

The Inorganic Chemistry Division is advancing research and development of high value added products that contribute to the environment and energy saving by utilizing core technologies such as fine particle synthesis technology cultivated in the production of titanium dioxide pigment.

In addition, the division is actively engaged in basic research to develop new businesses, and in process development for manufacturing next-generation products.



Electron microscope



Laboratory

Organic Chemicals Division



Central Research Institute (Kusatsu)

To help achieve stable food supply around the globe, the Organic Chemicals Division engages in R&D of highly effective agrochemicals that are very safe and environmentally compatible. In recent years the division has also been developing products for the medical field and animal healthcare.



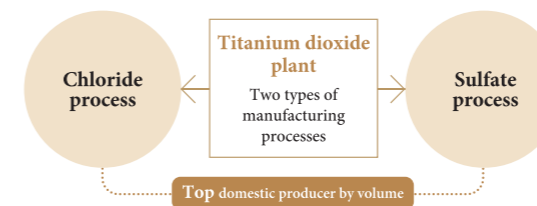
Research lab



Experimental greenhouse

Titanium Dioxide Plant

Japan's only plant that employs the chloride method to produce titanium dioxide. Two types of manufacturing processes—chloride and sulfate—are used to produce approximately 50% of the titanium dioxide manufactured in Japan, which is also exported to Asia and other parts of the world.



Yokkaichi Plant



Pharmaceutical plant



Titanium dioxide plant (control room)

ISK's Quality Management System

Our Yokkaichi Plant got ISO 9001 certification in April 1996 and continues to carry out quality control meetings at the highest levels. Periodic QMS* internal audits are conducted, and an MS (QMS/EMS) Committee and Quality Management Committee are in place as part of a management system that ensures high quality.

*QMS: Quality Management System

Functional Materials Plant

Manufactures ultrafine titanium dioxide, high-purity titanium dioxide, photocatalytic titanium dioxide, white conductive powder, and other functional materials that are closely integrated into people's lives.

Agrochemicals Plant

Primarily engages in the commercial production of herbicides, insecticides, fungicides, and other agrochemicals.

Pharmaceuticals Plant

Manufactures and supplies to pharmaceutical companies the active pharmaceutical ingredient of cevimeline hydrochloride hydrate, a medication for the treatment of patients with Sjogren's syndrome, with symptoms including dry mouth, etc., which is caused by salivary and tear gland dysfunctions. Manufacturing is approved by the U.S. Food and Drug Administration (FDA).

Chemical Products Plant

For effective utilization of the by-products of titanium dioxide, the plant produces gypsum, iron oxide and other environmental products that assist in environmental improvement. Also, the effluent from each plant is treated properly according to the law.

Compatibility of Innovation and Environmental Conservation

Nothing can ever make up for a degraded environment.

Producing technological innovation while conserving the environment is the perpetual theme of the chemical manufacturer. In light of unfortunate past results of putting economic activities first, the company has established an environmental conservation division at each business location and administrative division as part of a complete environmental conservation system. Through the aggressive environmental conservation activities, we continue to contribute to achieving a sustainable society.

ISK's Environmental Management System

Our Environment, Safety & Health Management Committee deliberates on the best policies for environmental conservation in general, occupational safety and health, chemical substance management, and climate change countermeasures. Under this Committee, we have established specific committees and councils, and promote various activities related to the environment, and to occupational safety and health. In addition, the Yokkaichi Plant acquired ISO 14001 certification in April 2011. Through periodic EMS* internal audits and other activities by the MS Committee and Environmental Preservation Committee it carries out daily environmental management activities and is working to make further improvements.

*EMS: Environmental Management System

Promoting Responsible Care and Sharing Information

We carry out Responsible Care activities—hearing the concerns of citizens and developing mutual understanding through dialogue. We also share information on environmental conservation and occupational safety and health in our Integrated reports.



Integrated reports are available on the company's website.

Proper Management of Chemical Substances

We prepare and maintain Safety Data Sheets (SDS) for all products and intermediates that provide hazard and toxicity information. In addition to providing this information to our customers, we are contributing to environmental conservation, safety and health, and legal compliance through in-house training.



We supply information regarding the safety of chemical substances.

Disclosing Information on Environmental Protection

The Yokkaichi Plant sets up the environmental information display in front of the main entrance of the plant. It provides information to visitors and serves to raise environmental awareness among employees.



We release NOx concentrations in exhaust gas and other figures subject to water quality regulations.

Coexisting with Local Community

We offer plant tours and participate in local events to actively communicate with citizens. We aim to be more open and cooperative, behaving as a good corporate citizen.



Every year we participate in local river and roadside cleanup activities organized by a neighborhood association.

Company Profile

Company name	ISHIHARA SANGYO KAISHA, LTD.
Head office	3-15 Edobori 1-chome, Nishi-ku, Osaka 550-0002
Founded	September 10, 1920
Incorporated	June 1, 1949
Business locations	Head Office, Central Research Institute, Yokkaichi Plant, Tokyo Branch, Chubu Branch, Sapporo Sales Office, Sendai Sales Office, Fukuoka Sales Office, Argentina Branch, Singapore Branch

Basic Philosophy

- Contribute to social development, protection of life and environmental preservation
- Respect shareholders, customers, suppliers, local communities and employees
- Abide by laws and regulations; maintain transparency in business activities

Code of Conduct

- At Ishihara Group, we will strictly observe laws, regulations, social norms and Company rules, while steadfastly adhering to high ethical standards, so as to gain social trust in our business.
- In manufacturing activities, we will place the utmost priority on global environmental protection, as well as on worker safety, and will work to prevent any workplace accident or disaster.
- On the basis of respect for human rights, we will promote mutual understanding and cooperation among employees, in order to create an open and friendly workplace.
- To maintain transparency in our business activities, we will promote communication with local communities and society, and will disclose corporate information in a timely and appropriate manner.

History

Sep. 1920	In Osaka, Hiroichiro Ishihara established Nanyo Mining Partnership Co., a firm dedicated to iron mining in Surimedan, Johol on the Malay Peninsula.
May 1924	Purchased an iron and manganese mine in Kemaman, Torenaganu on the Malay Peninsula.
Aug. 1929	Renamed the Firm to Ishihara Sangyo Marine Partnership.
Mar. 1934	Reorganized the Firm into a limited company. Opened the Kishu Mine (copper and sulfide ores) in Mie Prefecture.
Oct. 1938	Began building Yokkaichi Plant in Mie Prefecture. (Completed copper refinery and sulfuric acid plants in January 1941.)
Jun. 1943	Transferred shipping business to Nihon Marine Co., Ltd. Renamed the Firm to Ishihara Sangyo Kaisha, Ltd.
Jun. 1949	Dissolved the Firm in compliance with the Industrial Readjustment Law. Restarted operations under the new company: Sanwa Mining & Industrial Co., Ltd., which was renamed Ishihara Sangyo Kaisha, Ltd. the same month.
Jul. 1949	Listed Company's stock on the Tokyo and Osaka Stock Exchanges.
Apr. 1950	Constructed a herbicide plant in Yokkaichi.
Jul. 1952	Constructed a chemical fertilizer plant in Yokkaichi. (Withdrew from business of chemical fertilizer in February 1990.)
Mar. 1954	Constructed a sulfate processed titanium dioxide plant in Yokkaichi.
Jun. 1958	Opened a research institute in Yokkaichi, which was renamed the Central Research Institute in June 1963.
Mar. 1963	Constructed a titanium yellow (yellow pigment) plant in Yokkaichi.
Apr. 1965	Relocated the Central Research Institute to Kusatsu, Shiga Prefecture.
Sep. 1970	Completed a wastewater treatment facility in Yokkaichi.
Oct. 1974	Constructed a chloride processed titanium dioxide plant in Yokkaichi.
Dec. 1974	Constructed a sulfuric acid plant in Yokkaichi that employed the sulfur combustion method.
May 1978	Closed the Kishu Mine.
Oct. 1981	Constructed an organic intermediate CTF plant in Yokkaichi.
Dec. 1983	Constructed a magnetic iron oxide plant in Yokkaichi. (Withdrew from business of magnetic materials for videotapes in March 2001.)
Aug. 1986	Established ISK SINGAPORE PTE. LTD., ISK's subsidiary in Singapore, and constructed a chloride processed titanium dioxide plant.
Aug. 1989	Transferred agrochemicals marketing business in Japan to Ishihara Sangyo Agrochemicals Co., Ltd., one of ISK's subsidiaries. (now ISK Biosciences K.K.)
Nov. 1990	Purchased SDS Enterprise in the U.S. (now ISK Biosciences Corporation)
Jul. 1996	Transferred agrochemicals marketing business in Europe to ISK BIOSCIENCES EUROPE N.V., one of ISK's subsidiaries in Europe.
Feb. 1998	Sold agrochemicals business in the U.S. to Zeneca Limited. (now Syngenta Limited)
Feb. 1999	Commenced custom manufacturing of active pharmaceutical ingredient in Yokkaichi.
Dec. 2001	In Yokkaichi, constructed a facility for manufacturing HVJ-E vector for gene function analysis. Available until March 2022.
Mar. 2005	Acquired 100% ownership of Fuji Titanium Industry Co., Ltd.
Jun. 2005	Decided to recall Ferosilt voluntarily (stopped selling in April 2005) and then, received local governments' orders to take measures under the Waste Management and Public Cleansing Act.
Nov. 2005	Established a joint venture for marketing agrochemicals (ZHEJIANG ISK & TAURUS CHEMICAL CO., LTD.) in China.
Sep. 2006	Formed a business alliance with United Phosphorus Limited (UPL), the largest manufacturer of agrochemicals in India.
Mar. 2008	Reviewed the company's overall compliance status. (Announced findings of the review and measures to prevent recurrence in May 2008.)
Jun. 2010	Launched Environmental Materials on a full scale.
Aug. 2013	Shut down the chloride processed titanium dioxide plant of ISK SINGAPORE PTE. LTD. (Completed liquidation in March 2020.)
Apr. 2015	Established ISK BIOSCIENCES INDIA PVT. LTD.
Dec. 2015	Completed the final disposal of Ferosilt.
Jan. 2018	Established ISK BIOSCIENCES (THAILAND) LTD. Established ISK (SHANGHAI) CHEMICAL CO., LTD.
Sep. 2018	Received approval for manufacturing and marketing of a veterinary drug in Japan.

ISK ISHIHARA SANGYO KAISHA, LTD.