Providing Technology to Society
Transforming Technology into Pride
Tokuyama's technology, based on chemistry, creates the value that customers truly want.

Japan was once completely reliant on imports for its soda ash. In 1918, Tokuyama Corporation was established in Tokuyama (now Shunan City), Yamaguchi Prefecture to remedy this lack of a domestic source. Tokuyama later began producing cement, and then responded to the growth of Japan’s chemicals industry by adding a broad array of chemicals to its product lineup.

The company’s main business fields are: information and electronics, where its main product is polycrystalline silicon, which has numerous semiconductor applications; life and healthcare, which includes eyeglass lens materials, dental materials, and other such products; and environment and energy, which includes resources- and other environment-related businesses.

At the Tokuyama Group, we are committed to creating value centered on the field of chemistry. In the process, we can do our part to help enhance people’s lives as well as build a better society.
New Foundation

VISION OF TOKUYAMA

Centered on the field of chemistry, the Tokuyama Group will continue to create value that enhances people’s lives

ASPIRATIONS

Shift from a focus on quantity to quality (FY2025)

Global leader in advanced materials / Leader in its traditional businesses in Japan

VALUES

Customer satisfaction is the source of profits

A higher and broader perspective

Personnel who consistently surpass their predecessors

Integrity, perseverance, and a sense of fun

STRAATEGY

Since its founding, Tokuyama has had special advantages based on its highly efficient production facilities and its in-house power generation capacity, which is among the best in the nation. The company has exploited these strengths to develop traditional businesses such as chemicals and cement. More recently, Tokuyama entered the field of specialty chemicals, and the expertise it has gained through the business has enabled the company to develop technical prowess in new fields.

MISSION

Foundation Strengths

- Good natural port and competitive industrial complex
- Highly efficient Tokuyama Factory through integration
- Japan’s 8th leading in-house power generation capacity
- Employee integrity and perseverance
- Sound management

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TOKUYAMA COMPANY PROFILE
Basic chemicals are manufactured based on Tokuyama's advanced technologies, cultivated over its 100-year history.

The Chemicals Business Division is engaged in the manufacture and sales of inorganic chemicals and chlorine derivatives. With Tokuyama's superior technologies driving growth over a century of history supplying high quality chemicals, Tokuyama aspires to earn customer satisfaction.

Main applications
- Material for glass
- Food and beverage additive
- Polyvinyl chloride product

Soda Ash and Calcium Chloride Business
Tokuyama is the only manufacturer of soda ash and granular calcium chloride in Japan, offering not only industrial grades but also food additive grades.

Major Products
- Soda ash / Sodium bicarbonate / Sodium silicate cullet
- Calcium chlorinated liquid, granular
- Crystalline layered sodium silicate

Chlor-Alkali and Vinyl Chloride Business
This is one of Tokuyama’s main businesses, with a variety of product line-ups consisting of caustic soda, hydrogen, chlorine, chlorine derivatives such as hydrochloric acid, and raw materials for polyvinyl chloride (PVC).

Major Products
- Caustic soda (aqueous, flake) / Methylene chloride
- Hydrochloric acid / Sodium hypochlorite
- Propylene oxide (PO) / Vinyl chloride monomer (VCM)

New Organic Chemicals Business
High-quality isopropyl alcohol (IPA) is manufactured using Tokuyama's proprietary direct hydration process. No air pollutants and industrial wastes are emitted.

Major Products
- Isopropyl alcohol (IPA)

Taking responsibility as the only soda ash manufacturer in Japan – Leveraging reliable technologies to assure a stable and continuous supply of products to customers

Soda ash is a basic chemical used as a raw material in the production of glass, soap, and other products. Until the early 20th century, Japan had completely relied upon imported soda ash. Aiming to remedy such constraints, i.e., the lack of a domestic source, Tokuyama (then “Nippon Soda Kogyo”) was established in 1919 to begin soda ash production domestically. Since then, the soda ash business has been a mainstay of Tokuyama’s traditional businesses. The high safety and reliability of plant and equipment for soda ash, calcium chloride, and sodium bicarbonate, along with the strict product quality controls, enable Tokuyama to manufacture food additive grades in addition to industrial grades.

Technologies have evolved and accumulated in the century since Tokuyama’s establishment, and the earnest efforts of Tokuyama employees continue to ensure Tokuyama quality.

High-quality caustic soda, manufactured using an ultra-energy-saving process at a large-scale plant

Caustic soda is produced by the electrolysis of brine. Tokuyama is one of the largest manufacturers in Japan. Its advanced ultra-energy-saving technology is highly appreciated, and won the Japan Soda Industry Association Prize for Technology in 2007.

High-purity chlorine and hydrogen, by-products of caustic soda production, are supplied to work sites throughout the Tokuyama Factory and used widely as raw materials for an array of derivatives and products.

Caustic soda is a basic inorganic chemical with a very wide range of applications. It is used in the manufacture of paper, synthetic fiber, soap, chemical seasonings, and so on. Tokuyama does its utmost to assure a stable and continuous supply, living up to the pride acquired over its long history.
Taking semiconductors to a new level of miniaturization – Perpetual innovation to meet society’s needs

Higher R&D capability and strict quality management are required to respond to the pace of innovation in ICT devices as well as environmental and energy-saving industries. Tokuyama contributes to society by providing high value-added products that meet the needs of customers.

Electronic Materials Business

Tokuyama is doing its part to build the information technology-based society of the future by providing essential products focusing on high-purity polycrystalline silicon.

Major Products
Polycrystalline silicon, polysilicon

Fumed Silica Business

Tokuyama’s fumed silica features high purity, excellent dispersibility, and a high specific surface area. It has a wide range of applications from fillers to chemical mechanical polishing (CMP).

Major Products
Fumed silica / High-purity fused spherical silica

Thermal Management Material Business

Tokuyama’s many products with excellent heat dissipation properties are contributing to the development of semiconductors with smaller size and greater output.

Major Products
High purity aluminum nitride (AlN) powder and granule
Aluminum nitride (AlN) fiber

IC Chemicals Business and Cleaning System Business

Tokuyama supports Asian semiconductor manufacturers by providing the high-purity chemicals that are indispensable to the manufacturing processes, which feature advanced miniaturization.

Major Products
Positive-type resist developer / High purity chemicals for electronics manufacturing / Solvent for cleaning metals

Manufacturing materials with excellent heat dissipation properties to facilitate downsizing and increase output of ICT devices – Helping to make life better, behind the scenes

In 1983, Tokuyama became the first company in the world to successfully make light-transmitting, sintered aluminum nitride ceramics. Ever since, the company has been a world leader in the manufacture of aluminum nitride products. High-purity aluminum nitride powders produced using Tokuyama’s proprietary technology have extremely few impurities and feature high heat dissipation (thermal conductivity) as well as electrical insulation.

Tokuyama’s aluminum nitride products are used as heat dissipation material for such applications as micronized semiconductor devices, the operation of which becomes unstable when heated, and industrial electronic equipment which generates high heat. The company’s aluminum nitride powder holds a 75% share of the global market. This is one of the company’s highest value-added products which contributes to technological innovation.

Leveraging outstanding quality and R&D capabilities to provide the polycrystalline silicon that supports the ongoing miniaturization of semiconductor devices

The Tokuyama Factory is a world-leading manufacturer of high-purity polycrystalline silicon, which is produced as a raw material for silicon wafers. All of Tokuyama’s advanced purification technologies are utilized to develop the company’s polycrystalline silicon.

The raw material for polycrystalline silicon is silica stone. Through a reduction process, silica stone is turned into metallic silicon, which is then reacted with hydrogen chloride to produce trichlorosilane. This is purified by distillation, and reacted with hydrogen to produce high-purity polycrystalline silicon inside a bell jar.

Outstanding quality and the highest level of purity in the world are what make Tokuyama so competitive. Further growth of the business can be expected.
Uniquely supporting daily life and industry by manufacturing cement – From construction of social infrastructure to facilitating a recycling-oriented society

Workplaces are equipped with the latest energy-saving control devices, but their performance relies on how well people operate. The performance of manpower acquired through years of experience involved in cement production is a priceless asset to Tokuyama.

Cement Business
Tokuyama’s diverse products meet various purposes in many environments.

Major Products
- Ordinary Portland cement
- Blast furnace slag cement
- Early-strength Portland cement
- Moderate-heat Portland cement
- Cement soil stabilizer
- Ready-mixed concrete
- Concrete repair material
- Shikkui Lemarge

Recycling and Environment Business
Tokuyama uses a wide variety of waste materials as alternative raw materials or as recycled fuel in its cement kilns. Careful inspections are carried out to ensure an environmentally friendly manner of operation.

Major Products
- Waste plastic recycled as an alternative fuel
- Municipal incinerator ash recycled as an alternative raw material for cement
- Gypsum recycled from wasted gypsum board

Commitment to recycling material
Cement Business: Helping to realize a recycling-oriented Society
Tokuyama’s cement business was started to utilize waste material generated from the production process of soda ash. In 1995, Tokuyama succeeded in becoming the first manufacturer in the cement industry to use waste plastics as an alternative of fuel in the front section of a cement kiln (rotary kiln), and established a technology.

The production capacity of the Nanyo Plant of the Tokuyama Factory, as a single factory, is one of the largest in Japan. Cement-related products from here, such as cement and cement soil stabilizer, are used in construction of buildings and welfare support facilities such as port facilities, bridges and roads. These materials are indispensable components of social infrastructure.

People are refined by another. Tokuyama’s journey in pursuit of cement and other technologies has reached 100 years.
Odyssey continues further

In the cement production process, Tokuyama accepts a large volume of waste materials, including waste plastics which are generated from manufacturing activity of outside companies and municipal incinerator ash which is generated from incineration of household waste, and uses them as alternatives of raw materials and fuels. Highly sophisticated operation skills are necessary to use waste materials as alternatives, because waste materials are inconsistent in terms of quality. Thus, in cement production, it is vastly important that the operation skills of veteran operators are passed on to younger operators.

Tokuyama has a unique approach of training which requires the trainee to “plan and do on their own”. Firstly, the trainee (younger operator) is given instructions of job from trainer (veteran) at their workplace, and then the trainee drafts a personal work plan by foreseeing and taking notes on hidden risks and remarkable points before he does the job.
Enriching daily life with
unique technologies for a
brighter tomorrow

Chemistry lives within the products people use around
the world every day. Tokuyama makes people’s lives
more comfortable by providing various products
including medical diagnosis systems, active
pharmaceutical ingredients, dental materials, food
packaging films and back sheets for disposable diapers.

Fine Chemicals Business
Strong in organic synthesis technology, Tokuyama is a
formidable provider of a wide variety of items ranging
from active pharmaceutical ingredients to healthcare
products.
Major Products
Active pharmaceutical ingredients and intermediates
Photochromic dye materials

NF Business
Our breathable film that is impermeable to water while
air and moisture flows through contributes to a healthy
and comfortable life.
Major Products
Microporous film

Group Companies
This diverse product lineup facilitates good living and
better health.
- Polyethylene film
- Diagnostic reagents and systems
- Dental materials and equipment
- Ion exchange membranes and electro dialyzers
- Plastic window sashes and various kinds of house
  construction materials

A continual process of professional
development – Enabling Tokuyama
people to meet client needs with
totally unique solutions that change
the world

Tokuyama’s expertise in organic synthesis has given birth to
photochromic materials, which become colored when
exposed to the strong ultraviolet rays of outdoor sunshine,
and become transparent again when shielded from
exposure in the shade or indoors.

Our photochromic materials are used to make plastic
lenses for eyeglasses that block ultraviolet rays and
protect the wearer from glare and ultraviolet light.

Tokuyama also produces hard coatings that protect
plastic lenses from scratching.

From the development of materials to their manufacture and
marketing, Tokuyama takes an interdisciplinary approach
that cuts across the boundaries between different
departments and considers everything from the customer’s
point of view. Thanks to great cooperation, the company is
able to quickly and reliably meet diverse needs.

Active pharmaceutical ingredients and
intermediates made possible by
Tokuyama’s expertise in organic
synthesis – Solid trust built on
rigorous management

The Kashima Factory is equipped with a cutting-edge
manufacturing facility that uses Good Manufacturing
Practices (GMPs). The facility is operated in compliance with
a strict management system and provides stable supplies of
high-quality active pharmaceutical ingredients and organic
intermediates (drugs, dyes, pigments, and other
intermediates). Energies are also being channeled into
development of active pharmaceutical ingredients for
generic drugs.

In addition, products that bring comfort and convenience to
life, such as dental materials and back sheets for disposable
diapers, have been mainstays of the company’s Life &
Amenity division. Strict quality control is maintained all the
more carefully with such products, precisely because they
come in direct contact with a user’s body.
Making the most of special technologies developed in cutting-edge fields, Tokuyama not only strengthens existing businesses, but also grows new businesses by conducting R&D and business activities from the customer’s point of view.

Steadily Expand Growth Businesses

### Aggressive development of growth businesses to assist the future society

#### Steadily Expand Growth Businesses

#### Social Trends
- Spread of mobile technologies
- Increasing environmental awareness
- Growing interest in health
- Increased networking
- Aging population

#### Society’s Needs
- Addressing society’s needs
- Minimization of devices
- Prevention and improved healthcare
- Reduction in CO₂ emissions
- Displacement of energy inefficient equipment

#### Customer-oriented R&D and business activities
- Generic drugs (Pharmaceutical ingredients)
- High-purity chemicals (IPA/TMAH)
- Semiconductor wafers (Polysilicon)
- Abrasives (Fumed silica)
- Dental material (Composite resin)
- Advanced medical diagnostics (Reagents/UCAF)
- Light modulating material (Photochromic materials)
- Power semiconductor (AlN/BN)

#### Tokuyama’s Unique Technologies
- High purification
- Reduction nitridization
- Sintering
- Sol-gel
- Powder technology
- Crystallization, deposition
- Electrode and membrane
- Photopolymerization
- Molecular design
- Organic synthesis / Direct hydration

### Aggressive development of growth businesses to assist the future society

#### Healthcare Products
- Recognized as the Top Universal Composite by The Dental Advisor for nine consecutive years
- One of two major producers worldwide

#### ICT
- Global Market Share: 75%
- Asian Market Share: 30%
- Asian Market Share: 40%

#### GROWTH BUSINESSES

Tokuso IPA SE
- Positive-type photosensitive developer, tetramethylammonium hydroxide (TMAH)
- Global Market Share: 75%

#### Aluminum nitride powder
- The global market share of Tokuyama’s aluminum nitride powder is 75%. It is an indispensable thermal dissipating material for downsizing information and communication technology (ICT) related equipment. Market growth is expected in thermal dissipating applications for photodiodes and semiconductor manufacturing equipment.

#### “Tokuso IPA SE” high-purity chemicals for electronics manufacturing
- For the semiconductor industry, where the miniaturization of circuit patterns is required, Tokuyama has achieved 99.999% purity with its high-purity electronics grade isopropyl alcohol (IPA), made using its proprietary hydration process. This high level of quality meets customers’ requirements for cleaning fluid in the semiconductor industry.

#### Healthcare Products
- Dental materials
  - The market demand for dental materials is expected to grow, especially in emerging countries. In the United States, the composite from Tokuyama Dental has acquired an excellent reputation as an aesthetic restorative material, and it has been rated as the Top Universal Composite by The Dental Advisor for nine consecutive years. Tokuyama will further increase its market share and promote its brand in emerging markets by opening additional sales outlets and providing enhanced technical support and quality assurance, and by corresponding with pharmaceutical affairs officials.

#### ICT
- “Tokuso IPA SE” high-purity chemicals for electronics manufacturing
- For the semiconductor industry, where the miniaturization of circuit patterns...
Tokuyama is expanding its business globally and maintains production and sales bases in seven countries, mainly in Asia.

Business Sites in Japan

Tokuyama Factory
Tokuyama’s principal production site is the Tokuyama Factory, which has a great port and one of the largest in-house power generation facilities in Japan. The integration of production facilities here is one source of its formidable competitive strengths.

Kashima Factory
The Kashima Factory is Tokuyama’s production center for organic chemicals in the Kanto region. Operating in accordance with Good Manufacturing Practice (GMP) guidelines, the Kashima Factory engages in small-batch manufacturing of a wide range of products including various organic chemicals and active pharmaceutical ingredients.

BUSINESS LOCATIONS

Tokuyama is expanding its business globally and maintains production and sales bases in seven countries, mainly in Asia.

Tokyo Head Office
FRONT PLACE AKIHABARA
7-5, Sekihara-cho, Chiyoda-ku, Tokyo 101-8816, Japan
TEL: +81-3-5207-2500 FAX: +81-3-5207-2990

Osaka Office
Nakanoshima Central Tower
2-7, Nakanoshima-2-chome, Kita-ku, Osaka-shi, Osaka 530-0055, Japan
TEL: +81-6-6205-7220

Hiroshima Branch
Hiroshima Nissay Green Bldg.
8-18 Teppocho, Naka-ku, Hiroshima-shi, Hiroshima 730-0017, Japan
TEL: +81-6-6201-7200  FAX: +81-6-6201-7220

Takamatsu Branch
New Annex, Takamatsu Dai-ichi Seimei Building
2-1-1 Kotobuki-cho, Takamatsu-shi, Kagawa 760-0023, Japan
TEL: +81-87-822-0063  FAX: +81-87-822-3627

Fukuoka Branch
Kyowa Building
2-8-38 Tenjin, Chuo-ku, Fukuoka-shi, Fukuoka 810-0001, Japan

Tsukuba Research Lab
Located far from the company’s production facilities, researchers at Tokuyama’s Tsukuba Research Lab let their imaginations run unrestricted in a freewheeling atmosphere and take on challenges of developing utterly unique products.

Sendai Branch
Sal & Snap Building
1-17-20, Kambagou, Aoba-ku, Sendai-shi, Miyagi 980-0011, Japan
TEL: +81-22-262-2431 FAX: +81-22-262-4087

Shunan Sales Branch
Shunan Sales Branch
1-1 Mikage-cho, Shunan-shi, Yamaguchi 745-8648, Japan
TEL: +81-834-34-2000  FAX: +81-834-33-3790

Kashima Factory
This is Tokuyama’s only offshore cement production facility. Quality standards for cement products vary by country. Tokuyama has build up cement manufacturing processes in New Caledonia in order to accommodate the growth of its business in Asia and Oceania.

Japan

Tokuyama Asia Pacific Pte. Ltd.
Tokuyama Electronic Chemicals Pte. Ltd.

Taiwan

Tokuyama Asia (Shanghai) Co., Ltd.
Tokuyama Chemicals (Zhejiang) Co., Ltd.

China

Tokuyama Korea Co., Ltd.
Tokuyama America Inc.

U.S.A.

Tokuyama Korea Co., Ltd.
Tokuyama Trading (Shanghai) Co., Ltd.

Korea

Tokuyama Chemicals (Zhejiang) Co., Ltd.

Germany

Tokuyama Europe GmbH

Singapore

Tokuyama Asia Pacific Pte. Ltd.
Tokuyama Electronic Chemicals Pte. Ltd.

Taiwan

Tokuyama Asia Pacific Pte. Ltd.
Tokuyama Electronic Chemicals Pte. Ltd.

Global Network

Tokuyama is expanding its business globally and maintains production and sales bases in seven countries, mainly in Asia.

Tokuyama is expanding its business globally and maintains production and sales bases in seven countries, mainly in Asia.
Tokuyama Soda Trading Co., Ltd.  
Manufacturing and sale of ion exchange membranes and related equipment  
1-7-8 Mikado-cho, Shinagawa-ku, Tokyo 141-0054, Japan  
TEL: +81-3-5433-3000  
FAX: +81-3-5433-3010

Tokuyama Chiyoda Gypsum Co., Ltd.  
Manufacturing and sale of gypsum and related raw materials  
2426-1 Kamiaoe, Tsukumi-shi, Oita 879-2461, Japan  
TEL: +81-97-534-6081  
FAX: +81-97-538-1528

Kyotoku Co., Ltd.  
Manufacturing and sale of rayon and related raw materials  
2-7-8 Irihune-cho, Shunan-shi, Yamaguchi 745-0047, Japan  
TEL: +81-834-22-1908  
FAX: +81-834-33-3677

Exel Shionomaru Corporation  
Manufacturing and sale of plastic concrete windows and various types of oversized concrete  
2-7-8 Ikeda-cho, Shinagawa-ku, Tokyo 141-0054, Japan  
TEL: +81-3-5433-3000  
FAX: +81-3-5433-3010

According to the document, the companies listed include Tokuyama Soda Trading Co., Ltd., Tokuyama Chiyoda Gypsum Co., Ltd., Kyotoku Co., Ltd., Exel Shionomaru Corporation, and Tokuyama Dental Corporation. The document also mentions a range of products and services associated with these and other companies, including manufacturing and sales of various materials and products. The companies are located in various areas of Japan, with mentions of addresses and telephone and fax numbers for contact. The document also includes sections on company history, healthcare related to dental care, and other businesses operated by the Tokuyama Group.