

# Nissan Chemical CORPORATION







Nissan Chemical Corporation has contributed to industrial development leveraging the potential of chemistry since its founding in 1887.

Today's global society is facing various issues and challenges.

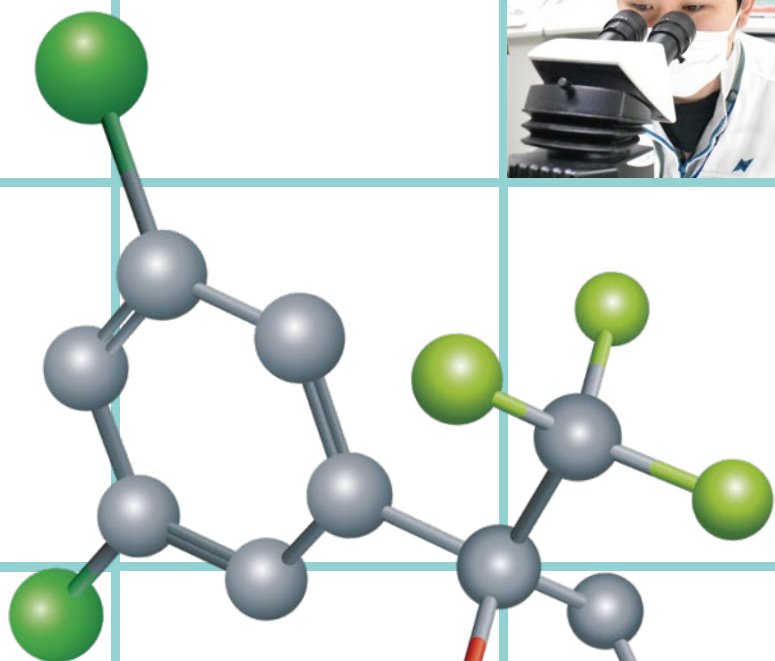
Digitalization, decarbonization, energy recycling, AI utilization, sustainable development, declining birthrate, and aging population, to name just a few.

Nissan Chemical strives to help solve these issues, combining the potential of chemistry with the company's innovative ideas and technologies.

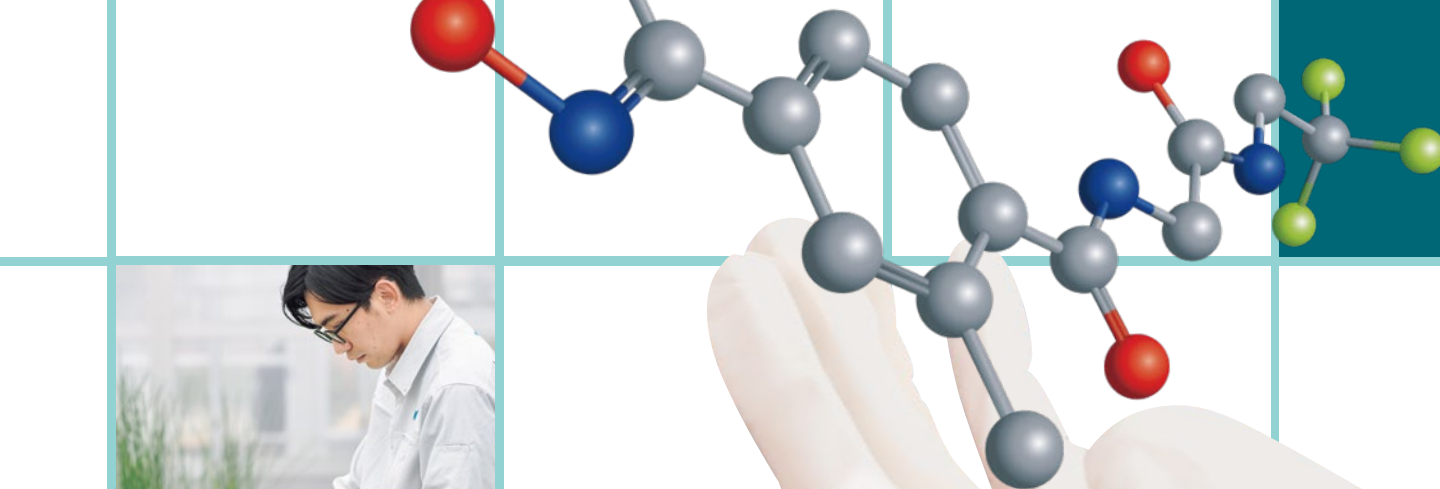
Chemical reactions are continuously taking place everywhere, in people's daily lives, in the global environment, and even in determining what you dream of.

Chemistry is truly full of amazing possibilities!

Nissan Chemical is a company that, founded on chemistry, supports today's society and creates the future.



Fluralaner (p.10)



# WHERE IT



# ALL BEGINS

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※The information shown represents the registration and sales of our technologies and products in Japan.

# Business Segments

Most of the products are comprised of industrial chemicals, such as ammonia and sulfuric acid, and derivative products/high-purity products that have been developed downstream with added value. These products support people's lives in a wide range of fields. By building an efficient production system, we strive to provide excellent products and technologies while reducing the environmental burden.

## Chemicals

Ammonia-related products  
Sulfuric acid-related products  
Fine chemicals  
(high added value chemicals)

## Performance Materials

Liquid crystal alignment material  
Anti-reflective coating for semiconductor lithography  
Inorganic materials

In this rapidly evolving business, it is necessary to quickly and accurately grasp the needs and technological trends of the market. For this, sales, research, and production, including overseas bases, are integrated, and we emphasize activities that are closely related to customers. We aim to contribute to the development of society by providing products and services based on the reliable technical capabilities that we have cultivated.

Four business segments maximize the core technological capabilities cultivated throughout our history. While keeping a close eye on changes in the environment surrounding our customers and markets and the global situation, we will promote the expansion of existing products, which are the source of our growth, and the steady development of new products.

## Agricultural Chemicals

Agrochemicals  
Veterinary pharmaceuticals

We contribute to a stable food supply through consistent business activities from research on potential new agricultural chemicals to their development, manufacture, and sales, and expansion of a broad product lineup through the acquisition of ingredients from other companies and joint development of products.

## Healthcare

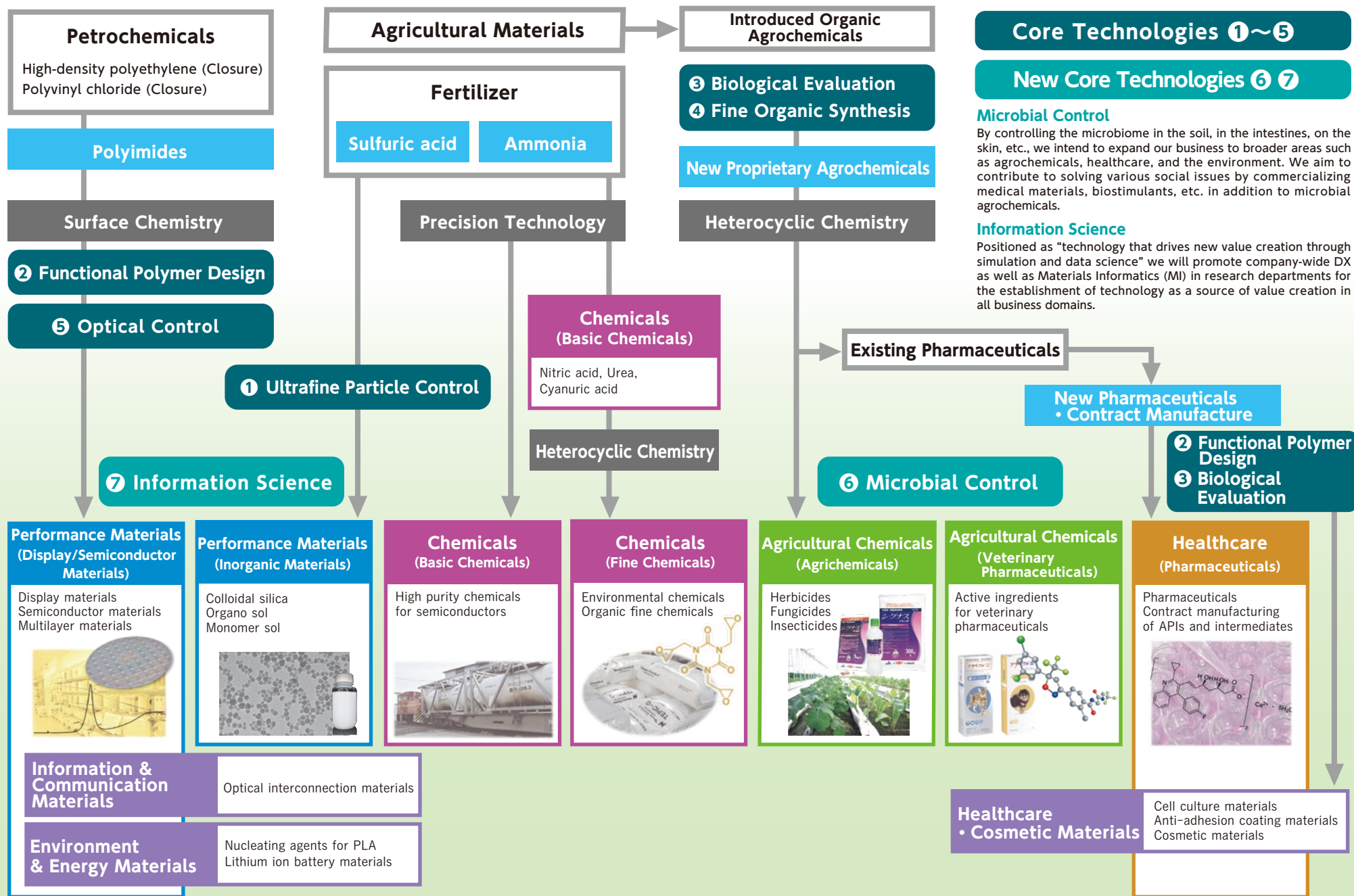
Pharmaceuticals  
Custom chemicals ~Finetech®~

- Manufacturing process development
- Manufacturing of APIs and Intermediates

We accelerated the selection and concentration of business areas in order to appropriately respond to changes in the business environment and achieve mid- to long-term growth. In April 2022, the drug discovery research functions were transferred to the Planning and Development Division, and the Healthcare Division will be responsible for manufacturing and sales of new drugs and medical materials as well as the Finetech® business.

# History of Our Technology and Research & Development

Originally a fertilizer manufacturer, Nissan Chemical Corporation has grown with its five core technologies and they have become the main source of our competitiveness. In addition to the existing core technologies, we have added new core technologies such as "Microbial Control" and "Information Science."





# Chemicals

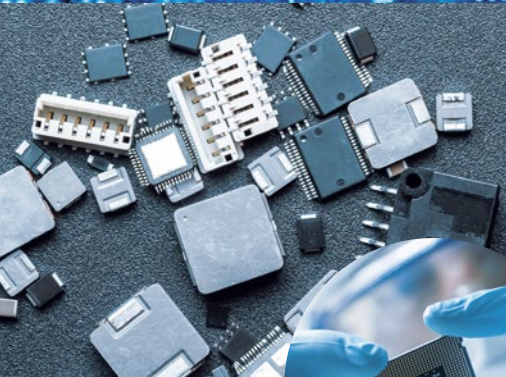
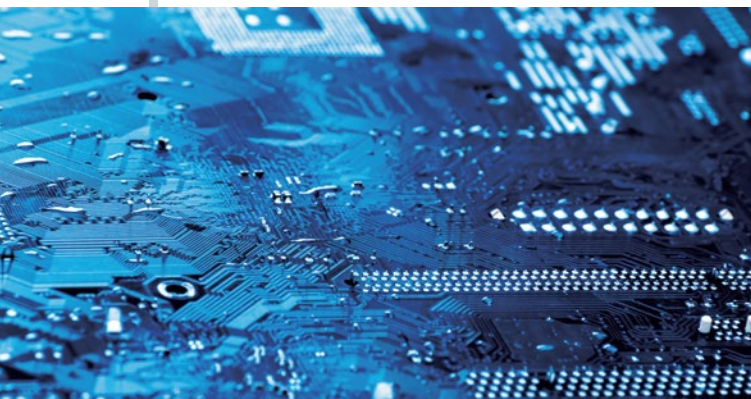
Our Chemicals business started with the manufacture of sulfuric acid and ammonia. Now, in addition to products for general industrial use, we provide our customers with specialized products and technologies, including high-purity chemicals for electronic material applications, high-grade urea solution for removing air pollutants, and cyanuric acid derivatives for use in water quality improvement applications.

## Basic Chemicals

We provide products for a wide range of fields of demand, focusing on sulfuric acid, nitric acid, ammonia, and other heavy chemicals, as well as high-purity chemicals for the washing of semiconductors.

### High-purity chemicals

Agents used for semiconductors/LEDs require extremely high purity. We provide sulfuric acid, nitric acid and ammonia to this industry, receiving high acclaim in the process.



To reduce the environmental impact, we are working on modal shift.



A ceramic bottle used to carry sulfuric acid, produced from 1893 to around 1960

Granulation Tower, symbol of Toyama Plant



### AdBlue®

AdBlue® is a high-grade urea solution used in the "urea SCR system," a technology for purifying emissions. When sprayed onto emissions from diesel vehicles, it breaks down nitrogen oxide (NOx) into harmless nitrogen and water, which helps to reduce environmental impact.

※AdBlue® is a registered trademark of the Verband der Automobilindustrie (VDA).







## Fine Chemicals

We conduct business focused on environmental chemical products, including the special epoxy "TEPIC<sup>®</sup>," used as a sealant, etc., halogen-free flame retardant "melamine cyanurate," highly branched saturated alcohol "FINEOXOCOL<sup>®</sup>" and the sterilizer/disinfectant HI-LITE<sup>®</sup>.

In addition, we also handle health foods such as Nissan Reishi, OCEAN BRIGHT<sup>®</sup> SUPER DHA and etc.

### HI-LITE<sup>®</sup>

Chlorinated isocyanurate is the main ingredient in this product, which is used for the sterilization and disinfection of swimming pools and water purification tanks, and thus contributing to public hygiene.

### TEPIC<sup>®</sup>

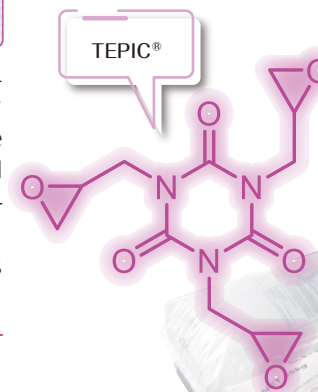
TEPIC<sup>®</sup> is an epoxy compound which possesses excellent heat resistance, weather resistance, and transparency. It is widely used in semiconductors, LEDs, and substrate-related electronic materials as well as in powder coating curing agents.

### Nissan Reishi

Nissan Reishi is a safe Japanese-made health food product created through domestic processing of Reishi mushrooms grown in Japan.



Auto-palletizer,  
Onoda Plant



Nissan Reishi



# ▴ Performance Materials

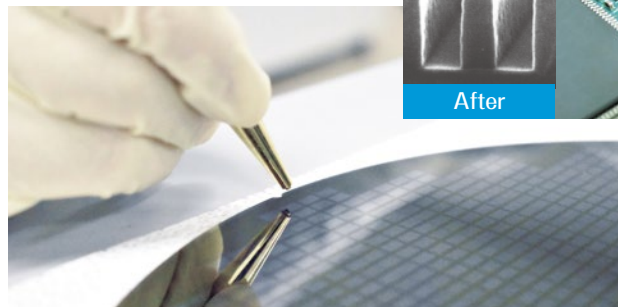
Advancements in semiconductors, sensors, and displays are required to realize a smart society. The Performance Materials Division contributes to the realization of a smart society through the expansion of applications for existing products and the development of new products in the three pillars of displays, semiconductors, and inorganic materials.

## ▴ Display Materials

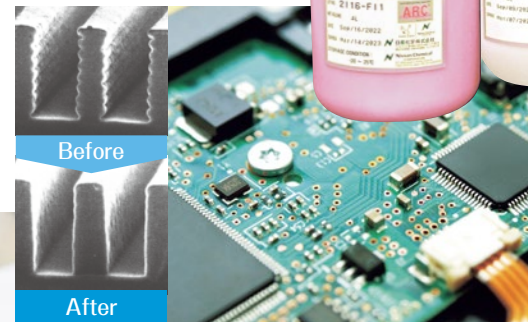
Nissan Chemical's display materials business, led by SUNEVER® (polyimide for LCD/flat panel displays) and peripheral materials such as NHC® (insulating hard coating), meets the needs of the expanding display market in and around Asia.

### SUNEVER®

SUNEVER® is a polyimide-based liquid crystal alignment material. It is used to coat the surface of the outer glass panels to align liquid crystal molecules in a certain direction.



In the field of displays, research and development undertaken on polyimide resins in the early 1980s led to these products being adopted as orienting materials in early LCD displays on devices such as calculators and watches. Peripheral materials have since been supplemented to keep up with advances in LCD display technology enabling the business to achieve dramatic growth alongside that of LCD displays.



## ▴ Semiconductor Materials

Nissan Chemical has been providing bottom anti-reflective coating (ARC®) materials for the micro-lithography semiconductor manufacturing process and expanding its material technology and business to multi-layer process material as well.

Currently, with the adoption of EUV exposure technology (wavelength: 13.5 nm, semiconductor circuit width: 7 to 3 nm), we are promoting the mass production and next-generation development of EUV materials and also focusing on three-dimensional (3D) packaging technology preparing for the limits of optical shrink.

### ARC®

ARC® is an anti-reflective coating developed for semiconductor lithography. It is used to coat the part under the photoresist, to resolve a number of issues with lithographic exposure such as reflection from varying substrate levels. This makes it possible to significantly reduce the device failure rate.

※ARC® is registered trademarks of Brewer Science, Inc.



We started the manufacture and sale of ARC® in 1998 based on a licensing agreement with US company, Brewer Science, Inc. ARC® is a coating material designed to prevent issues such as irregular reflection and interference of light, and coating failure during micro-fabrication of the photoresist.



## ▶ Inorganic Materials

The foundation of Nissan Chemical's inorganic materials operations is our nanoparticle control technology. As one of our core technologies we have over many years continued to develop its applications for a variety of fields in our effort to supply unique products.

More recently, with SNOWTEX® as its major brand, the products have expanded into cutting edge fields, as coating materials for optical films and electronic substrate materials, etc. and gained a reputation as indispensable products in a wide variety of fields.

### SNOWTEX®

SNOWTEX® is a colloidal solution in which ultrafine particles of silicic acid anhydride are dispersed in water as the dispersion medium. Offering various functions, it is used for a wide range of products such as coating materials for optical films and electronic substrate materials, etc.



SNOWTEX®



日産化学株式会社

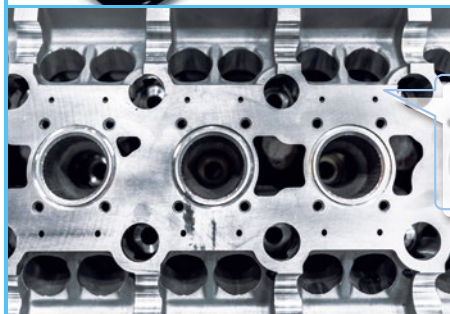


Usage examples of inorganic colloids



Coating materials for optical films

Our nanosilica dispersions work as a filler of hard coatings and improve the hardness, anti-scratch property, and anti-blocking property of optical films.



Binding Investment castings / Catalyst support / Refractories

By sintering at high temperature, our colloid products form a strong bond and are used as an inorganic binder.



Electrical insulating varnish

Silica sol is used for various motor applications to improve electrical insulating properties.

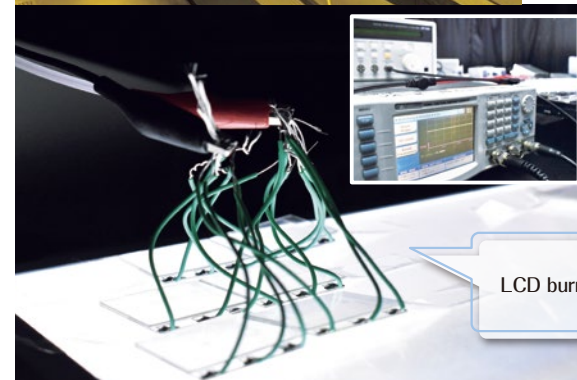


High-refractive-index coating

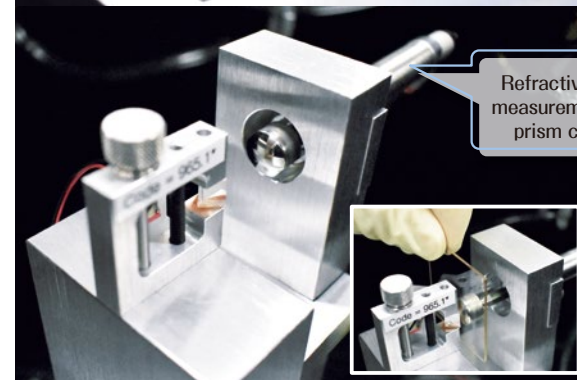
Improves hardness, scuff resistance, soil resistance, and corrosion resistance.



12-inch wafer coating system



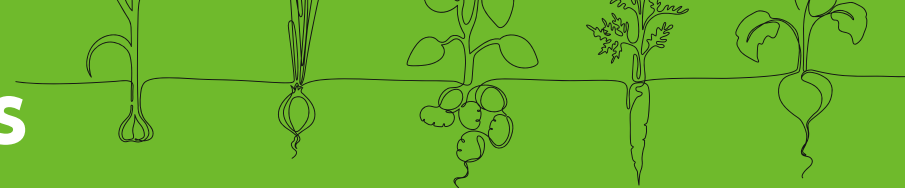
LCD burn-in test



Refractive index measurement with prism coupler



# △ Agricultural Chemicals



ROUNDUP®

The Agricultural Chemicals Division provides customers with agrochemicals, agents for green space management, and veterinary pharmaceuticals based on the idea of a stable food supply for people around the world and agrochemicals that are also friendly to the global environment. As a company that provides products which contribute to a stable food supply, we are promoting various efforts to solve social issues.

## → Agrochemicals

We develop, manufacture, and sell herbicides, insecticides, and fungicides, etc., for use on agricultural land and green spaces as well as herbicides for general households.



### ROUNDUP®

ROUNDUP® is a herbicide used all over the world which has low toxicity to humans and animals and does not remain in the soil or in the environment. In 2002, we acquired exclusive marketing rights in Japan from Monsanto.

### ALTAIR®

ALTAIR® is a wide-spectrum herbicide that is highly effective in eliminating bulrush and cyperaceous perennial weeds. It is also effective for weeds that are resistant to conventional sulfonylurea-based herbicides. We market this product in Asia, primarily Japan, South Korea and China.

### GRACIA®

GRACIA®, a pesticide developed in-house, is fast-acting on a wide range of crop pests and has little impact on honeybees which are useful insects. Since it was launched in South Korea ahead of Japan in 2018, it has been sold in Asia (India/Indonesia), the Middle East (Saudi Arabia/UAE), and West Africa.

### ZIMANDITHANE®

ZIMANDITHANE® is a long-acting protective fungicide. Because of its excellent rain resistance, highly active ingredient, and wide spectrum of effective diseases and suitable crops, it is favored by many producers.



ZIMANDITHANE®



【成分】フルキサメタミド  
[4-[(5R)-5-(3,5-ジクロロフェニル)-4,5-ジクロロ-5-(トリフルオロメチル)-1,2,4-オキサゾール-3-イル]-N-[[[2,2-(4-メチルピリジン-2-イル)エチル]オキシ]フェニル]フルキサメタミド (PRT-1) 4.6% (メチルナフタレン (PRT-1) 11%]  
【性状】黄褐色澄明可乳化油状液体  
※適用害虫はラベルをご確認ください  
農林水産省登録  
第24185号  
殺虫剤分類 30  
速く効く。あの害虫にも効く。  
GRACIA  
グレイシア  
フルキサメタミド乳剤  
殺虫剤  
250ml  
日産化学株式会社  
東京都中央区日本橋2-6-1





## Green Space Management Agents

We develop, manufacture, and sell herbicides, insecticides, and fungicides, etc., for use in golf courses, parks, etc.

### IKARUGA®

Contains Thifluzamide, which was acquired from Dow AgroSciences in 2010, and is effective for large patch disease in grass lawns. For agricultural land, it is sold as the fungicide "GREATAM®" for sheath blight disease in rice fields.

### IZANAMI®

Insecticide, that contains the proprietary active ingredient Fluxametamide, protects grass against pests like Bluegrass webworm, Lawn cutworm and varieties of Japanese Beetle (larva). This insecticide is also promoted with other trade name GRACIA® that is a quick-action, broad-spectrum insecticide for agricultural targets on vegetables and tea.



IZANAMI®

## Veterinary Pharmaceuticals

We develop and manufacture drug substances for external antiparasite drugs for animals.

### Fluralaner

Fluralaner is a compound invented by Nissan Chemical used as an active ingredient in the veterinary pharmaceutical "BRAVECTO®" and "EXSOLT®" developed by MSD Animal Health (MAH). We manufacture and supply it to MAH as an API of veterinary pharmaceuticals. Fluralaner has remarkable features: it is highly safe and acts rapidly against major species of fleas and ticks and has a longer insecticidal effect than existing products as its effects remains even when highly diluted. EXZOLT® is a poultry medicine against red mites, held in high regard in Europe and beyond.

※BRAVECTO® and EXZOLT® are registered trademarks of Intervet International B.V. and Intervet Inc.



BRAVECTO®

IKARUGA®

Since entering the pharmaceutical business in 1982, the Healthcare Division has developed and launched a variety of products, starting with the external preparation of EPATEC®, which contains ketoprofen. With the technology we have cultivated so far, we will provide superior pharmaceuticals and medical materials for the sake of irreplaceable lives and smiles around the world.

## Healthcare

In 1994, a calcium channel blocker efonidipine hydrochloride (brand name: LANDEL®) was launched as our company's first new pharmacological. It is also available in South Korea under the brand name of "FINTE®." We discovered a new drug, pitavastatin calcium (brand name: LIVALO®), and launched by Kowa Company, Limited in 2003 on the Japanese market. Currently, it is sold in 30 countries around the world.

### Pitavastatin calcium hydrate (brand name: LIVALO®)

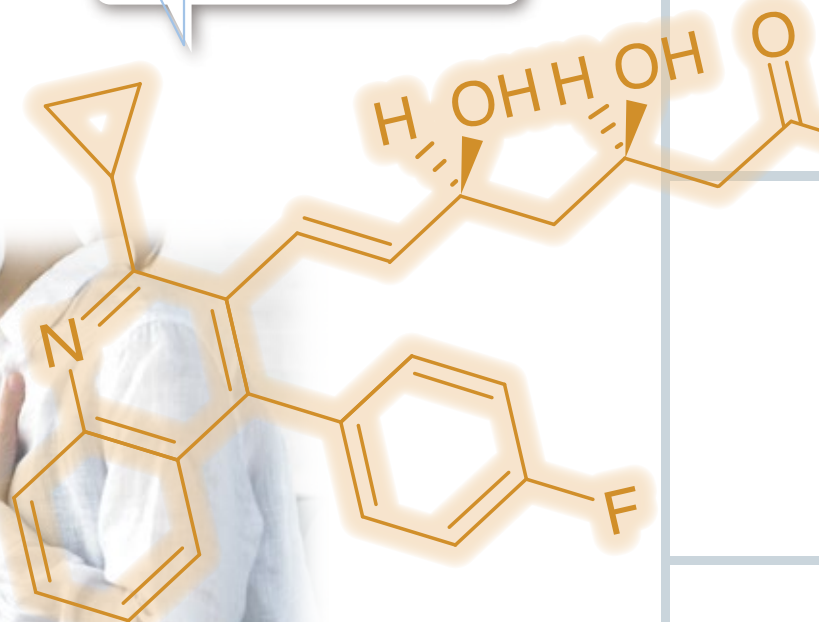
This is an antihypercholesterolemic agent characteristic of having a strong LDL cholesterol reduction effect and causing less drug-interactions.

### Efonidipine hydrochloride (brand name: LANDEL®, FINTE®)

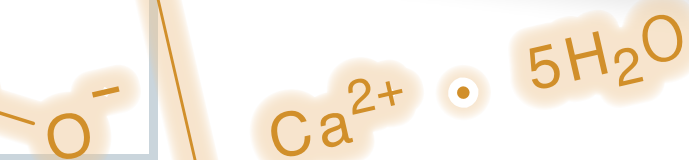
This is a long-acting calcium channel blocker characteristic of having renal protective functions. It is used for treating hypertension and angina.

※EPATEC® and LANDEL® are registered trademarks of Zeria Pharmaceutical Co., Ltd. and LIVALO® is a registered trademark of Kowa Company, Limited.

Pitavastatin Calcium Hydrate  
HMG-CoA Reductase Inhibitor







## Consignment

### • Manufacturing of APIs and Intermediates

Purification using large-scale preparative columns.  
Manufacturing of high potency active pharmaceutical ingredients.

### • Process Research

Development of novel synthetic routes.  
Scale-up research, etc.

### • Peptide Synthesis

The synthesis of medium-molecule pharmaceuticals (e.g., peptides and nucleic acids) by our proprietary liquid-phase synthesis technology "SYNCSOL®" that is price competitive and a method that we developed.

**SYNCSOL®: Original Convergent Liquid Phase  
Peptide Synthesis Technology**



# SYNCSOL

## Custom Chemicals

We operate a "solution proposal" contract business and a joint development business that provide total support for the development of active pharmaceutical ingredients (APIs) in response to customer needs. We accept contracts for the development of manufacturing processes at each stage from preclinical to commercial production, as well as for the manufacture of APIs and intermediates under GMP-compliant conditions. In recent years, we have developed, manufactured and sold high-potency generic APIs like prostaglandin derivatives and vitamin D3 derivatives by using our fine organic synthesis platform.



### The Onoda Plant

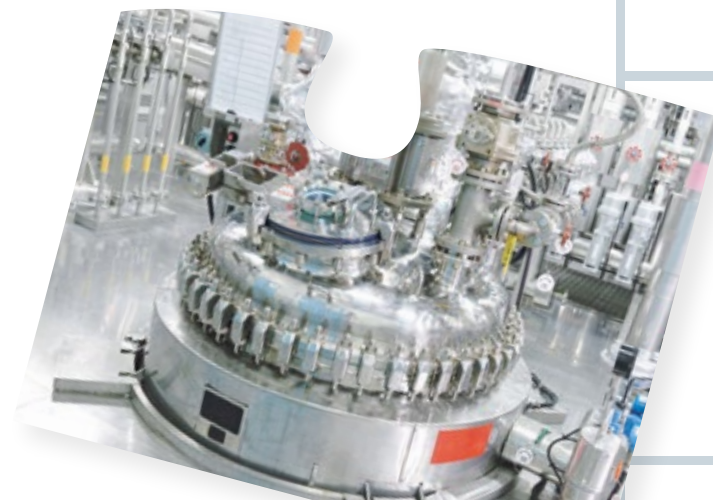
Manufactures active pharmaceutical ingredients (APIs) and their intermediates. In addition to GMP compliance, it is regularly inspected by domestic and foreign regulatory authorities as well as by customers to whom it delivers APIs, and its level of quality is consistently highly evaluated.

### Maxacalcitol

Maxacalcitol is used in the treatment of psoriasis vulgaris and secondary hyperparathyroidism.

### Eldecalcitol

Eldecalcitol increases bone mass and is used in the treatment of osteoporosis.



# Planning and Development Division



The mission of the Planning and Development Division is to create new materials and new businesses that will become future pillars in the fields of Information & Communication, Environment & Energy, and Life Science. As a future-creating company, we will challenge the unlimited possibilities of chemistry and strive to create high value-added products that meet the “trust” of our customers.

## Healthcare Business Development Department

Nissan Chemical Corporation has combined its unparalleled expertise in materials and biological evaluation to develop game-changing innovations. Our solutions benefit drug discovery including oligonucleotide therapeutics, material development for regenerative medicine, cosmetics and other healthcare business fields.

### Oligonucleotide Drug Discovery Platform

Nissan Chemical's oligonucleotide drug discovery platform, consisting of (1) modified nucleic acid MCEs, (2) single-stranded heteroduplex oligonucleotides, and (3) in silico sequence design algorithms, provides antisense oligonucleotide therapeutics with high efficacy and safety. We are working on innovative oligonucleotide drug discovery using our own platform through

in-house research and collaborations with pharmaceutical companies to build our R&D portfolio.

### Cell culture material ①②③

The 3-dimensional (3D) culture method “FCeM® series” realizes suspension and dispersion culture of adherent cells, and provides a culture environment that reduces stress and damage to cells during culture. Cellhesion® is a new culture scaffold that enables distributed culture of somatic cells showing anchorage-dependent proliferation such as mesenchymal stem cells, and FCeM® Advance-CR makes non-freeze storage and transport of spheroids and organoids possible.

### Anti-adhesion Coating Materials ⑥⑦⑧

prevelex® is a hydrophilic, anti-adhesion coating applicable to clinical application. prevelex®

improves spheroid formation, bioanalysis, and drug screening due to its high anti-adhesion efficacy against cells, proteins including antibodies, nucleic acids, and viruses.

### Cosmetic Materials ④⑤

NFG® is a cosmetic material for skin care and hair care. It is a product that applies the self-organization phenomenon of the characteristic integrant palmitoyl dipeptide-18, and in skin care applications, by forming a fiber film, it has both excellent moisturizing properties and a non-sticky feel. In hair care applications, by detecting and repairing damage inside the hair, you can experience improvements in hair suppleness.







## Information & Communication Materials Development Department

Our department's task is the planning and development of novel electronic materials for the next generation display and semiconductor packaging industry, as well as optical functional materials for the high-speed communication field.

### SUNCONNECT® 9

SUNCONNECT® is a polymer optical waveguide resin material with transparency from visible to near infrared region and solder reflowable, for the high-speed communication field.

## Environment & Energy Materials Development Department

We are developing materials for secondary batteries such as high capacity, High energy density lithium-ion batteries, materials for fuel cells, and materials for next generation solar cells.

### Ecopromote®

Ecopromote® acts as a stable nucleus during the

molding process of polylactic acid: PLA. It dramatically increases the crystallization rate and produces fine and uniform crystals. And these effects improve the molding cycle, heat resistance, and transparency of PLA products.

### Lithium-ion Secondary Battery Materials

10 11 12 13

We mainly develop the additive for lithium-ion secondary battery materials. Adding a small amount of this additive to the electrode material enhances the property stability and improves the performance of the battery. We are also developing materials that reduce electrode resistance, further improve adhesion, and improve battery performance by coating aluminum foil and copper foil that serve as current collectors.

### Environmental Harmony Materials

We are developing ion-conducting polymers that contribute to platinum reduction in fuel cells, organic thin-film solar cells as next-generation solar cells, and materials that improve the performance of perovskite solar cells.

## Animal Care Planning Group

As we expect the veterinary drug market to continue to grow in the future, we are dedicating further resources for the research and development of small molecule drugs in the veterinary field. We are also formulating strategies to establish a system for the development and marketing of veterinary medicines within Japan.

## Innovative Materials Planning Department

Through collaboration, investment, and M&A with start-up companies, we are working to accelerate commercialization by introducing new materials and technologies that will be the pillars of our future business and revitalizing the metabolism of development themes, by working with Nissan Chemical America Corporation.



# Corporate Profile

## Corporate Summary

Corporate Name : Nissan Chemical Corporation  
(from July 1st 2018)

Head Office : 5-1, Nihonbashi 2-Chome,  
Chuo-ku, Tokyo 103-6119, Japan

Founded in 1887 as Japan's first chemical fertilizer  
manufacturer

Capital Stock : 18,942 million yen  
Number of Employees : 3,137 (Consolidat-  
ed), 2,011 (Non-consolidated) as of March  
2024  
Sales Consolidated : 226.7 billion yen  
Operating Profit Consolidated : 48.2 billion  
yen

## History

1887 Founded as Tokyo Jinzo Hiryo, name later changed to Dainippon Jinzo Hiryo  
1937 Changed corporate name to Nissan Chemical Industries, Ltd.  
1989 Established Nissan Chemical America Corporation (NCA)  
1996 Established Nissan Chemical Houston Corporation (NCH)  
2001 Established Nissan Chemical Korea Co., Ltd. (now, NCK Co., Ltd.)  
2002 Established Nissan Chemical Europe S.A.S. in France  
2005 Established Nissan Chemical Agro Korea Ltd.  
2014 Established Nissan Chemical Product (Shanghai) Co., Ltd.  
2016 Established Nissan Chemical Do Brasil  
2017 Established Nissan Agro Tech India PVT. LTD.  
2017 Established Nissan Chemical Materials Research (Suzhou) Co., Ltd.  
2018 Changed corporate name to Nissan Chemical Corporation  
2020 Established Nissan Bharat Rasayan PVT. LTD.  
2023 Established Nissan Chemical Agro Singapore Pte. Ltd.

## Mission Statement (Our Values)

"Contribute to society with excellent technologies  
and products."  
"Promote prosperity and welfare through concerted  
efforts to constantly develop new areas."  
"Respect people who exhibit a sense of responsibili-  
ty, originality and motivation."

## Corporate Philosophy (Corporate Purpose)

Contribute to the protection of the  
global environment and the  
existence/development of  
humanity, offering the value sought  
by society.

## History

Nissan Chemical was founded in 1887 as Japan's first chemical  
fertilizer manufacturer. It all started when TAKAMINE Jokichi, a  
world-famous chemist, visited a chemical fertilizer manufacturer  
while studying in England and introduced the technology to Japan.  
With the support of SHIBUSAWA Eichi, MASUDA Takashi, and other  
business leaders at the time Tokyo Jinzo Hiryo, the predecessor of  
Nissan Chemical, was established.

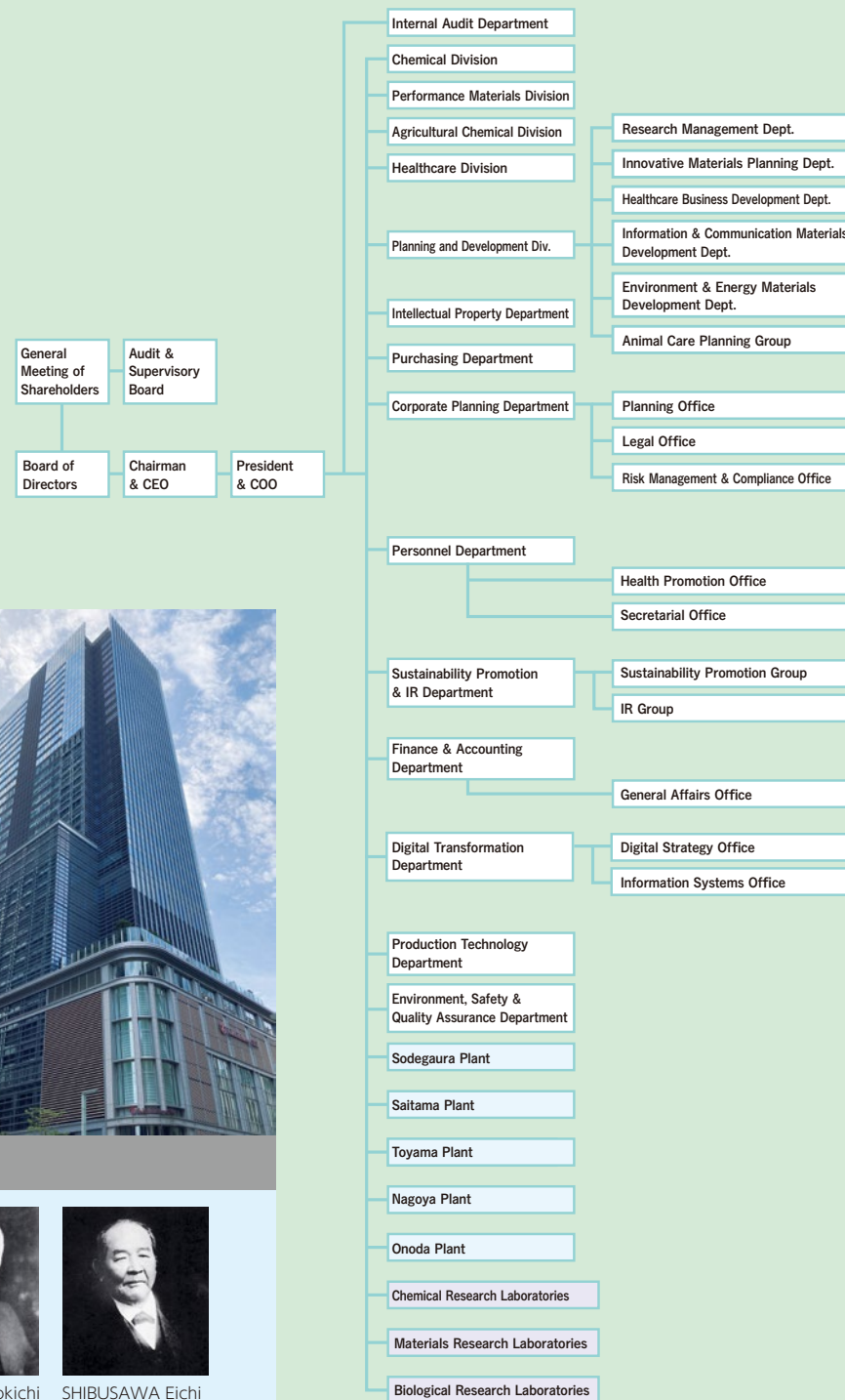


TAKAMINE Jokichi  
(1854 ~ 1922)



SHIBUSAWA Eichi  
(1840 ~ 1931)

## Organization





# Bases

## Domestic Bases

### Manufacturing Bases

#### Toyama Plant



- Basic Chemicals
- Performance Materials
- Semiconductor Materials
- Environmental Chemicals

#### Saitama Plant



- Agrochemicals

#### Nagoya Plant



- High-purity Sulfuric acid
- High-grade Urea solution

#### Onoda Plant



- Agricultural Chemicals
- Pharmaceuticals

#### Sodegaura Plant



- Performance Materials
- Display Materials
- Inorganic Materials

#### Head Office

- ★ Tokyo

#### Sales Office

- Sapporo
- Sendai
- Nagoya
- Osaka
- Hiroshima
- Fukuoka

### Research and Development Bases

#### Biological Research Laboratories Shiraoka



- Agricultural Chemicals R&D Dept.
- Toxicology & Environmental Science Dept.
- Medicinal Research Dept.

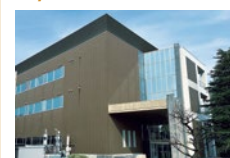
#### Materials Research Laboratories Funabashi



- Analysis Research Dept.
- Synthesis Research Dept.
- Agricultural Chemicals Research Dept.
- Pharmaceutical Research Dept.

#### Materials Research Laboratories

##### Toyama



- Semiconductor Materials Research Dept.

##### Funabashi



- Display Materials Research Dept.
- Advanced Materials Research Dept.
- Frontier Materials Research Dept.

##### Sodegaura

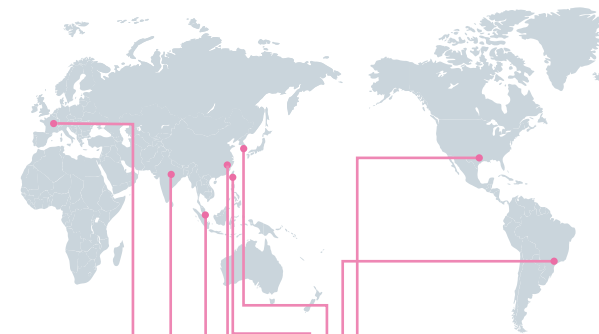


- Inorganic Materials Research Dept.



Details about domestic bases from this QR

## Overseas Bases



### France

- Nissan Chemical Europe S.A.S.
- Sales of agrochemicals

### India

- Nissan Agro Tech India PVT. LTD.
- Sales support and promotional services for agrochemicals
- Nissan Bharat Rasayan PVT. LTD.
- Manufacture and export of active ingredients of agrochemicals



### Singapore

- Nissan Chemical Agro Singapore Pte. Ltd.
- Sales support and promotional services for agrochemicals

### China

- Nissan Chemical Product (Shanghai) Co., Ltd.
- Sales support and promotional services for agrochemicals
- Nissan Chemical Materials Research (Suzhou) Co., Ltd.
- R&D, sales support and promotional services for performance materials



Details about overseas bases from this QR

### America

- Nissan Chemical America Corporation
- Manufacture and sales of inorganic materials



#### Santa Clara Office

- Market and technology development

### Brazil

- Nissan Chemical Do Brasil
- Sales support and promotional services for agrochemicals

### Korea

- NCK Co., Ltd.
- Manufacture and sales of display and semiconductor materials



- Nissan Chemical Agro Korea Ltd.
- Sales of agrochemicals

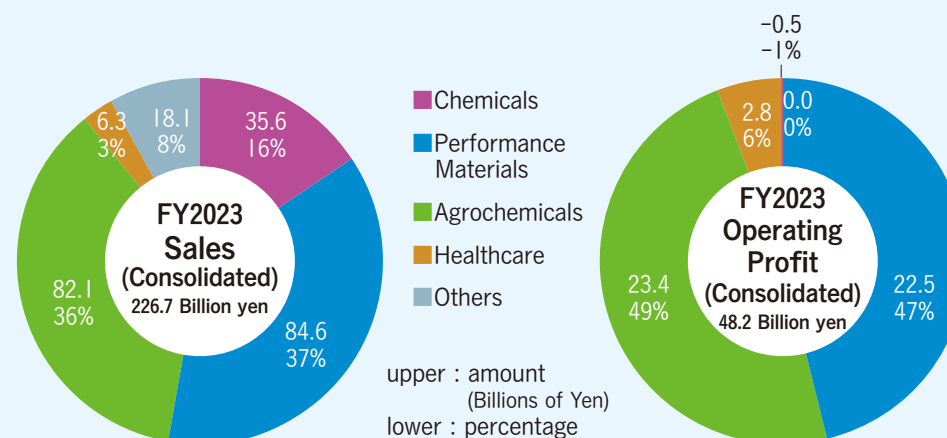
### Taiwan

- Nissan Chemical Taiwan Co., Ltd.
- R&D and sales support for display and semiconductor materials

# Financial Highlights / Features

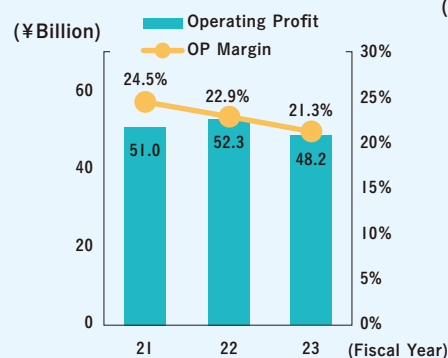
## Financial Highlights

	Billions of yen		
	2021	2022	2023
Sales	208.0	228.1	226.7
Operating Profit	51.0	52.3	48.2
Ordinary Income	53.7	55.8	51.6
Net Income	38.8	41.1	38.0



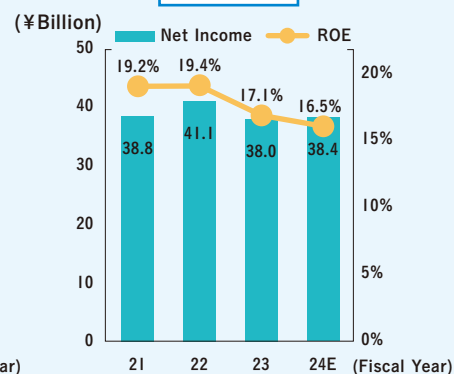
## Features

### Recording Stable OP Margin



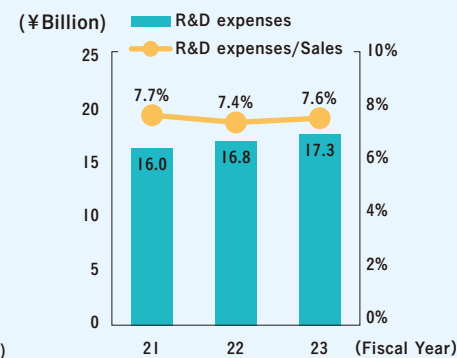
OP margin has been above 10% for 21 consecutive years (FY2003-2023)

### High ROE



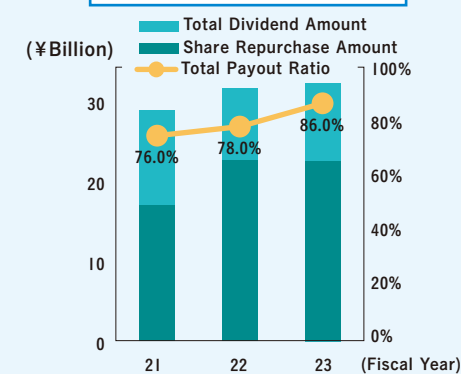
Positioned ROE as the most important financial indicator for many years  
Mid-Term Plan FY2022-2027 Target: above 18%

### R&D Oriented



Maintained about 8% R&D expenses/sales in recent years  
Approximately 40% of main career track employees are R&D personnel

### Aggressive Shareholder Returns

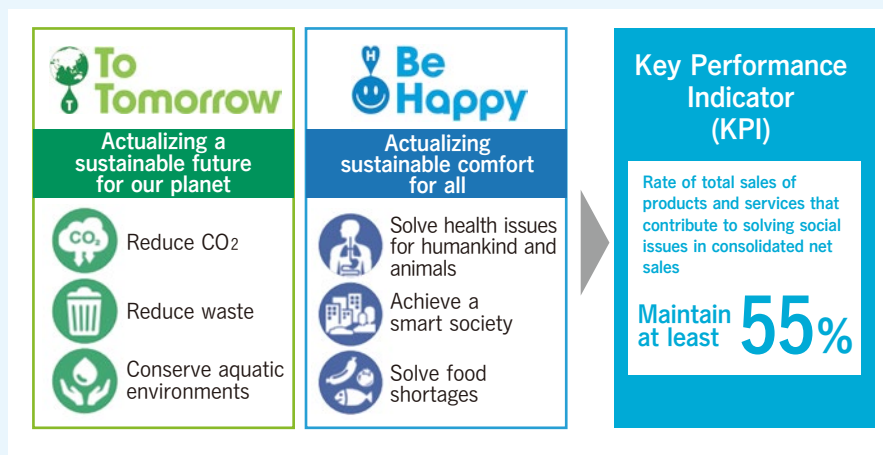


Total Payout Ratio  
Mid-term Plan FY2022-2027 Target : 75% after FY2020  
→ Achieved



# Nissan Chemical Sustainability Agenda

A plan to pursue “what we can do for the future of the globe and humankind” by providing products and services that contribute to solving social issues.

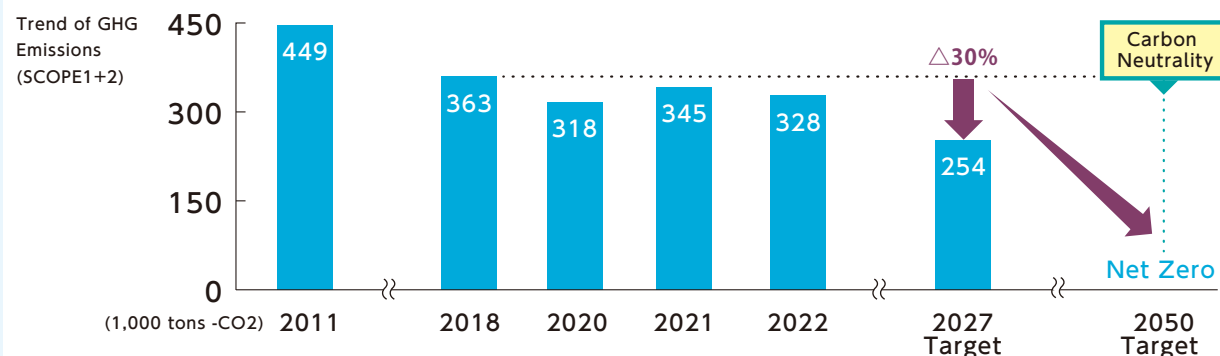


The Nissan Chemical Sustainability Agenda is a plan to pursue “what we can do for the future of the globe and humankind” by providing products and services that contribute to solving social issues.

We define “Actualizing a sustainable future for our planet (To Tomorrow)” and “Actualizing sustainable comfort for all (Be Happy)” as areas of contribution, and define the rate of total sales of products and services that contribute to these areas as a key performance indicator (KPI). In “Vista2027,” we have set a target of “maintaining at least 55%,” aiming to further expand our target products and services by fostering core technologies toward 2050.

## Achievement of Carbon Neutrality by 2050

We will focus on achieving carbon neutrality by FY2050 by changing raw materials and fuels, promoting energy savings, adopting renewable energy, introducing carbon negative technology, and taking other related measures.



## Main Initiatives

**Vista 2021**

- Conversion of naphtha (raw material) to LNG
- Conversion of heating furnace fuel and auxiliary boiler fuel from heavy oil to LNG

- Zero N<sub>2</sub>O emissions from nitric acid plants
- Melamine production shutdown
- Fuel conversion

- Improvement of production technology and processes
- Upgrade to energy-efficient equipment
- Electrification of fossil fuels

- Introduction of renewable energy
- Introduction of carbon negative technology



[www.nissanchem.co.jp](http://www.nissanchem.co.jp)

