

# Corporate History (Nissan Chemical History)

Nissan chemical was founded in 1887 as Japan's first chemical fertilizer manufacturer.

We contributed to dramatic increases in domestic food production by the enthusiasms and efforts of our pioneers under the founding spirit "to dedicate ourselves to prosperity of the nation by agricultural fertility". The pioneering spirit has been still very much alive at Nissan Chemical where we have been working to expand our business horizons with innovative technologies and projects that will make the world a better place for all.


**1887~**  
(1887) Tokyo Jinzo Hiryo  
(1889) Nippon Seimi Seizo

(1910) Dainippon Jinzo Hiryo


Tokyo Jinzo Hiryo (The Tokyo Artificial Fertilizer Company) started when Dr. Jokichi Takamine, who is perhaps best known for his discovery of the digestive enzyme taka-diastase, witnessed the age's state-of-the-art chemical fertilizer production technology while studying in England. Upon his return to Japan, he enlisted the aid of some of the era's most successful business tycoons (such as Eiichi Shibusawa and Takashi Masuda) to launch a groundbreaking business that would revolutionize Japanese agriculture.

As the plant site, the land in Ojima 1-chome, Koto-ku, Tokyo, now known as Kamayabori, had been selected for its convenience in transporting raw materials and products. In 1888, the production of superphosphate (fertilizer) started.


The main raw materials for superphosphate are phosphoric ore and sulfuric acid, and we had been aiming for the in-house production of sulfuric acid and the development of its derivatives. Then the products expanded into the industrial chemicals field, manufacturing sulfuric acid and soda products. The later-merged Nippon Seimi Seizo (now Onoda Plant) was established in 1889 to produce sulfuric acid and soda.



(Kamayabori Plant)



(Package of superphosphate)



(Advertising in 1891)


**1923~**  
(1923) (Three companies joint)  
(1937) Nissan Chemical Industries  
(1949) Nissan Chemical Industries (Spins off oils and fats section)

In the first half of the twentieth century, amid a variety of M&A activities by domestic corporates, we came to turning points with the three companies joint in 1923 and with the participation to Nissan zaibatsu in 1937.


The three companies joint was a merger of Kanto Soda, Nippon Kagaku Hiryo (renamed from Nippon Seimi Seizo) and Dainippon Jinzo Hiryo (surviving company).

The Company had been promoting business diversification and entered under the umbrella of Nissan zaibatsu in 1937, which was the 50th anniversary of its foundation, renamed Nissan Chemical Industries. Nissan zaibatsu was one of the new financial cliques that took over the Kuhara Mining (now JXTG Holdings) and was renamed Nippon Sangyo. It consisted of Nippon Mining in mining sector, Hitachi in the machinery sector, and Nissan Motor in the automotive sector and so on.

After World War II, under the separation directive based on the Corporate Reconstruction and Improvement Law, the fat and oil section was separated into Nippon Oil and Fats (now NOF) in 1949 and Nissan Chemical Industries newly started.



(Toyama Plant electrolytic facilities)

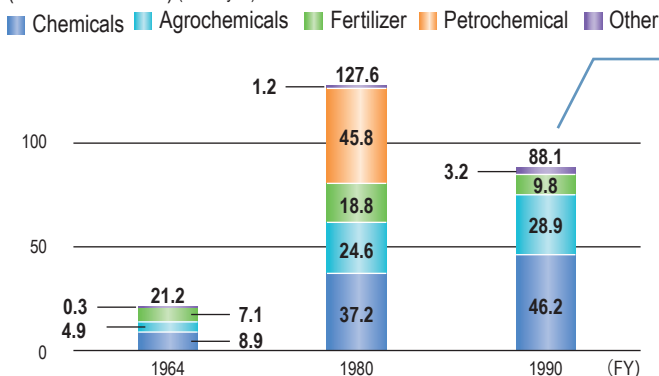


(Toyama Plant sulfuric acid warehouse)

[In 1928, we began integrated ammonia and ammonium sulfate manufacture at the Toyama Plant. Ammonia was produced through electrolysis process of water and continued until 1967.]

## Net Sales by Segment

(Non-consolidated) (billion yen)



Significant decrease in sales after withdrawing from petrochemicals

Nowadays, we provide products and services globally in the four business domains of Information & Communication, Life Sciences, Environment & Energy, and Chemicals & Affiliates, while also refining our core technologies that we have cultivated over the years.  
We are striving to create products that meet society's demands.

1965~ (1965)	(1988)	1989~ (1989)	(2018)
<p>Entering petrochemical business</p> <p>In the 1950s, as domestic imports of petrochemical products expanded and the momentum for domestic production increased, we established Nissan Petrochemicals in 1965 and entered the petrochemical business, starting with the production of higher alcohol.</p> <p>However, the petrochemical industry experienced a structural slump due to the impact of the two oil crises of the 1970s. The Company worked to rebuild its business, but it was unable to improve its profitability and began rationalization. The PVC business was transferred to Toyo Soda Manufacturing (now Tosoh), the higher alcohol and synthetic detergent business to Kyowa Hakko Kogyo (now KH Neochem), and the polyethylene business to Maruzen Petrochemical and the Company has withdrawn from the petrochemical business in 1988.</p> <p>Despite our long-awaited entry into the petrochemical business, the period of contribution to incomes was short, resulting in a large deficit. However, the development of this business brought the penetration of technological ideas to the Company, which led to the development of new technologies and businesses such as fine chemicals.</p>	<p>Withdrawal from petrochemical business</p>	<p>Nissan Chemical Corporation</p> <p>In 1989, we launched our Five-Year mid-term business plan with the aim of becoming a value-creating enterprise that was unique and R&amp;D oriented with two pillars: high-tech fields such as agrochemicals and pharmaceuticals, and traditional technology fields such as functional products and chemicals.</p> <p>The results of continued R&amp;D investment in this difficult situation emerged. By the early 1990s, a large number of agrochemicals were on the market, and in the late 1990s, LCD alignment coating materials grew significantly, while we entered the semiconductor field. In the 2000s, sales of LIVALO<sup>®</sup>, anti-cholesterol agent, increased significantly and we acquired exclusive marketing rights in Japan to ROUNDUP<sup>®</sup>, the world's largest herbicide. Since then, new agrochemicals have been introduced, and in 2013, the shipment of fluralaner, an active ingredient for veterinary pharmaceutical, which is one of the main products at present, began.</p> <p>In 2018, the Company has already been transcending the framework of industry in the development of its business and will accelerate this effort toward the future. In order to clarify this stance, we changed our name to Nissan Chemical Corporation.</p>	

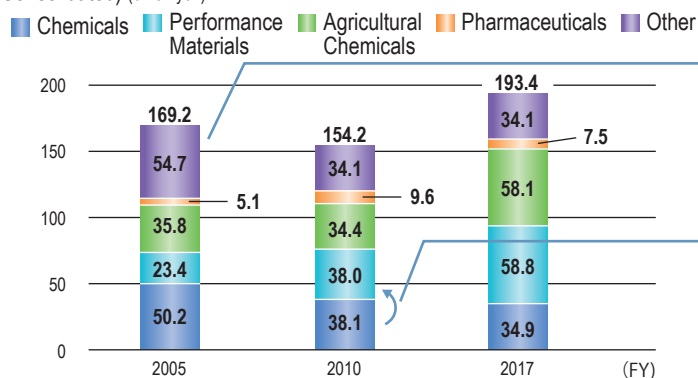
### Launch of Major Products

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| <ul style="list-style-type: none"> <li>(1951) SNOWTEX<sup>®</sup> (colloidal silica)</li> <li>(1964) Melamine</li> <li>(1965) HI-LITE<sup>®</sup> (disinfectant)</li> <li>(1978) TEPIC<sup>®</sup> (epoxy compound)</li> <li>(1979) High-purity Sulfuric Acid</li> <li>(1984) TARGA<sup>®</sup> (herbicide for grassy weeds)</li> <li>(1985) High-purity Ammonia</li> <li>(1987) High purity Nitric acid</li> <li>(1989) SUNEVER<sup>®</sup> (LCD alignment coating material)</li> <li style="padding-left: 20px;">SIRIUS<sup>®</sup> (herbicide for paddy rice)</li> <li>(1991) SANMITE<sup>®</sup> (acaricide for fruit trees and vegetables)</li> </ul> | <ul style="list-style-type: none"> <li>(1994) LANDEL<sup>®</sup> (anti-hypertension agent)</li> <li style="padding-left: 20px;">PERMIT<sup>®</sup> (herbicide for corn)</li> <li>(1998) ARC<sup>®</sup> (bottom anti-reflective coating)</li> <li>(2002) Roundup<sup>®</sup> (nonselective herbicide)</li> <li>(2003) LIVALO<sup>®</sup> (anti-cholesterol agent)</li> <li>(2005) AdBlue<sup>®</sup> (high-grade urea solution)</li> <li>(2008) LEIMAY<sup>®</sup> (fungicide)</li> <li>(2009) STARMITE<sup>®</sup> (acaricide for fruit trees and vegetables)</li> <li>(2010) Acquisition of Thifluzamide (fungicide)</li> <li style="padding-left: 20px;">ORACLE<sup>®</sup> (fungicide for soil-borne diseases)</li> <li>(2013) ALTAIR<sup>®</sup> (herbicide for paddy rice)</li> <li style="padding-left: 20px;">First shipment of fluralaner (active ingredient for veterinary pharmaceutical)</li> </ul> |
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Note) ARC<sup>®</sup> is a registered trademark of Brewer Science, Inc., and AdBlue<sup>®</sup> is a registered trademark of the Verband der Automobilindustrie.

### Net sales by segment

(Consolidated) (billion yen)



Including fertilizers. Fertilizers are not consolidated from fiscal 2007 due to spin-off of the fertilizer business.

Transferring inorganic materials from Chemicals to Performance Materials