

Head office:

Umeda Sky Building Tower East, 1-88 Oyodonaka 1-chome, Kita-ku, Osaka 531-0076, Japan
(General Affairs) TEL: 81-6-6440-5300 FAX: 81-6-6440-5330

Specialty Materials Segment	TEL	FAX
IT's and Electronic Products Dept.	81-6-6440-5319	81-6-6440-5328
Soarnol Dept.	81-6-6440-5313	81-6-6440-5326
Specialty Polymers Dept.	81-6-6440-5316	81-6-6440-5327
Functional Films Dept.	81-6-6440-5320	81-6-6440-5328
Basic Products Segment		
Acetyl Chemicals Dept.	81-6-6440-5310	81-6-6440-5326
Gohsenol Dept.	81-6-6440-5312	81-6-6440-5326
Fine Chemicals Dept.	81-6-6440-5315	81-6-6440-5327
China Marketing Group	81-6-6440-5338	81-6-6440-5326
Purchasing and Logistics Dept.	81-6-6440-5321	81-6-6440-5327
New Business Development Div.		
Advanced Polymers Business Dept.	81-6-6440-5341	81-6-6440-5327
Corporate Support Div.		
General Affairs and Human Resources Dept.		
(General Affairs)	81-6-6440-5300	81-6-6440-5330
(Legal)	81-6-6440-5300	81-6-6440-5330
(Human Resources)	81-6-6440-5301	81-6-6440-5330
Accounting Dept.		
(Accounting)	81-6-6440-5305	81-6-6440-5309
(Financial)	81-6-6440-5304	81-6-6440-5309
Corporate Planning Office	81-6-6440-5303	81-6-6440-5309
Information Systems Group	81-6-6440-5306	81-6-6440-5326
Business Efficiency Promotion Dept.	81-6-6440-5333	81-6-6440-5309
Auditorial Dept.	81-6-6440-5305	81-6-6440-5309
Production Technology Div.		
Engineering Dept.	81-6-6440-5322	81-6-6440-5326
Technical Dept.	81-6-6440-5322	81-6-6440-5326
Environment, Safety and Quality Assurance Dept.	81-6-6440-5302	81-6-6440-5326
Research and Development Div.		
Corporate Development Dept.	81-6-6440-5314	81-6-6440-5326

Nagoya Branch Office:

Dainagoya Building, 28-12, Meieki 3-chome, Nakamura-ku, Nagoya 450-0002, Japan
TEL: 81-52-565-3538 FAX: 81-52-565-3574

Tokyo Branch Office:

Mitsui Sumitomo Insurance TEPCO Building, 6-1 Kyobashi 1-chome, Chuo-ku, Tokyo 104-0031, Japan
(Administrative Dept.) TEL: 81-3-3564-7001 FAX: 81-3-3564-7014

Specialty Materials Segment	TEL	FAX
Soarnol Dept.	81-3-3564-7009	81-3-3564-7015
Specialty Polymers Dept.	81-3-3564-7010	81-3-3564-7015
Functional Films Dept.	81-3-3564-7006	81-3-3564-7017
Basic Products Segment		
Acetyl Chemicals Dept.	81-3-3564-7004	81-3-3564-7015
Gohsenol Dept.	81-3-3564-7005	81-3-3564-7015
Fine Chemicals Dept.	81-3-3564-7007	81-3-3564-7015
Purchasing and Logistics Dept.	81-3-3564-7003	81-3-3564-7015
(Purchasing)	81-3-3564-7012	81-3-3564-7015
New Business Development Div.	81-3-3564-7019	81-3-3564-7015
Administrative Dept.	81-3-3564-7001	81-3-3564-7014
Corporate Planning Office	81-3-3564-7002	81-3-3564-7015
Environment, Safety and Quality Assurance Dept.	81-3-3564-7029	81-3-3564-7015
Research and Development Div.	81-3-3564-7011	81-3-3564-7014

Central Research Laboratory:

13-1, Muroyama 2-chome, Ibaraki, Osaka 567-0052, Japan
TEL: 81-72-643-2251 FAX: 81-72-643-2257

Intellectual Property Dept.:

TEL: 81-72-643-2207 FAX: 81-72-643-3611

Ogaki Plant:

(Kanda) 35, Kanda-cho 2-chome, Ogaki, Gifu 503-0917, Japan
TEL: 81-584-81-4141 FAX: 81-584-81-7010

Functional Film Development Center:

TEL: 81-584-81-4184 FAX: 81-584-81-4387

Specialty Polymers Center:

TEL: 81-584-81-7394 FAX: 81-584-81-7392

(Kamiya) 80, Kamiya 2-chome, Ogaki, Gifu 503-0957, Japan
TEL: 81-584-89-3105 FAX: 81-584-89-7631

(Motoima) 1530, Motoima-cho, Ogaki, Gifu 503-0932, Japan
TEL: 81-584-89-3396 FAX: 81-584-89-3845

TEL: 81-584-89-3396 FAX: 81-584-89-3845

Mizushima Plant:

8-1, Matsue 4-chome, Kurashiki, Okayama 712-8052, Japan
TEL: 81-86-455-5211 FAX: 81-86-456-0574

Processing-Technique Development Center:
TEL: 81-86-455-5214 FAX: 81-86-455-5289

Kumamoto Plant:

221, Tsuigome-machi, Uto, Kumamoto 869-0408, Japan
TEL: 81-964-22-0850 FAX: 81-964-22-0430

NIPPON GOHSEI (U.S.A) Co., Ltd.

Sales of NIPPON GOHSEI Group products
12220 Strang Road, La Porte Texas 77571-9740, U.S.A
TEL: +1-281-842-5025 FAX: +1-281-842-5023

SOARUS L.L.C

Sales of and technical service for EVOH resin
3930 Ventura Drive, Suite 355 Arlington Heights, Illinois, 60004, U.S.A
TEL: +1-847-255-1211 FAX: +1-847-255-4343

NOLTEX L.L.C.

Manufacture of EVOH resin
12220 Strang Road, La Porte Texas 77571-9740, U.S.A
TEL: +1-281-842-5000 FAX: +1-281-842-5095

NIPPON GOHSEI Europe GmbH

Sales of and technical service for NIPPON GOHSEI Group products
Merowingerplatz 1a, D-40225, Dusseldorf, Germany
TEL: +49-211-38548824 FAX: +1-211-38548829

NIPPON GOHSEI UK Ltd.

Manufacture of EVOH resin
Saltend, Hull HU12 8DS, UK
TEL: +44-1482-333320 FAX: +44-1482-309332

NIPPON GOHSEI Shanghai Office

Marketing and technical service
Room 4211A The Center, No.989 Chang Le Road, Shanghai 200031, China
TEL: +86-21-5407-6333 FAX: +86-21-5407-6038

NIPPON GOHSEI

DIRECTORS AND AUDITORS

President	Kenichi Ogasawara	Board Director	Katsumi Nishii
Managing Director	Keiji Ishizaki	Board Director	Hideki Oono
Managing Director	Osamu Matsuda	Board Director	Keiichi Takahashi
Managing Director	Makoto Moritani	Board Director	Shigeru Tsuyuki
Board Director	Sumio Goto	Auditor	Yoshikazu Kumazawa
Board Director	Michio Oda	Auditor	Yoshio Iwamoto
Board Director	Takeo Kawabata	Auditor	Chihiro Miyazawa
Board Director	Junichi Akagi	Auditor	Kazunori Takada

COMPANY PROFILE

Established:

March 30, 1927

Name:

The Nippon Synthetic Chemical Industry Co., Ltd.
(NIPPON GOHSEI)

Capital:

17.9 billion yen (as of March 31, 2010)

Main Lines of Business:

The manufacture, processing and sale of:

- Functional Resins,
- Functional Films,
- IT's and Electronic Products,
- Raw Material for Pharmaceutical and Pharmaceutical Intermediates,
- Fine Chemicals,
- Acetyl Chemicals, etc.

Number of Employees:

1,009 (as of March 31, 2010)

URL:

<http://www.nippongohsei.com/>

Subsidiaries and Affiliates:

Chemical products manufacturers:

- NOLTEX L.L.C.
- NIPPON GOHSEI UK Ltd.

Film manufacturer:

- Kansai Kagaku Kogyo Co., Ltd.

Electronic materials manufacturer:

- Nichigo-Morton Co., Ltd.

Engineering company:

- Nichigo Engineering Co., Ltd.

Trading companies:

- Taisei Kayaku Co., Ltd.
- Nichigo Kyushu Co., Ltd.
- Taisho Technos Co., Ltd.
- NIPPON GOHSEI (U.S.A.) Co., Ltd.
- NIPPON GOHSEI Europe GmbH
- SOARUS L.L.C.

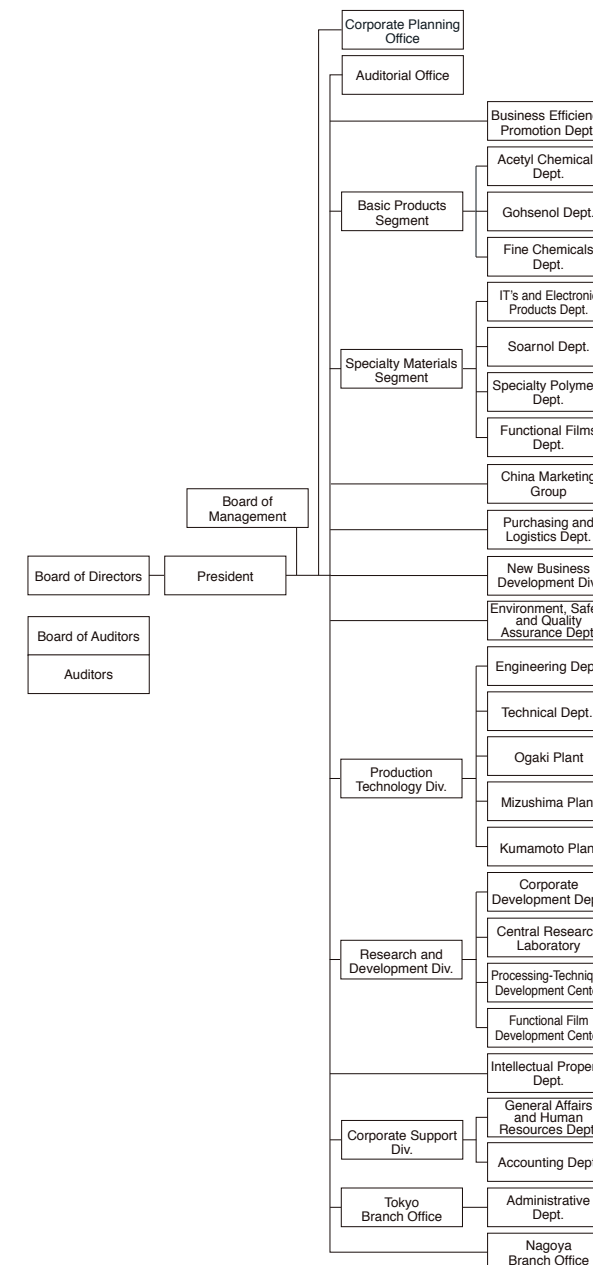
Distribution companies:

- Ogaki Nichigo Service Co., Ltd.
- Mizushima Nichigo Sangyo Co., Ltd.
- Kumamoto Nichigo Service Co., Ltd.

Service companies:

- Osaka Environmental Technology Center Co., Ltd.
- Kyosei Co., Ltd.

ORGANIZATION



HISTORY

- 1926 Established a production technology for the industrialization of acetic acid with acetylene, through joint research by four wood-vinegar-manufacturing companies.
- 1927 Established Nippon Gohsei Kagaku Kenkyujo through the tie-up of the four manufacturing companies. Started construction on the Ogaki Plant in Ogaki city, Gifu Prefecture.
- 1928 Changed the company's name to the Nippon Synthetic Chemical Industry Co., Ltd., succeeded in the industrialization of the first organic composition acetic acid in Japan, and in the following year, started construction on a hydration tower to greatly reinforce the capabilities of the company.
- 1936 Succeeded in the first production of vinyl acetate monomer (VAM) and vinyl acetate resin in Japan by use of acetylene method.
- 1939 Decided on a production base of acetone butanol (by consistency from carbide) in Uto city, Kumamoto Prefecture, and started construction of the Kumamoto Plant.
- 1947 Resumed research into producing VAM and the production of ethyl acetate in Ogaki.
- 1949 Started construction of a facility for VAM production at the Kumamoto Plant. Completed construction of GOHSENL (polyvinyl alcohol: PVOH) production plant at the Ogaki Plant.
- 1951 Reinforced the GOHSENL production equipment at both the Ogaki and Kumamoto Plants.
- 1958 Invested in Taisei Kayaku Co., Ltd.
- 1960 Started production of glyoxal and ketene derivatives at the Ogaki Plant. Established Ogaki Kasei Kogyo Co., Ltd. (currently Ogaki Plant Motoima) under joint management, mainly for the manufacturing of downstream products.
- 1963 Cooperated with Mitsubishi Kasei Kogyo Co., Ltd. (currently Mitsubishi Chemical Corporation) for material conversion of petrochemicals and decided on proceeding to the Mizushima Industrial Complex in Okayama Prefecture, established Mizushima Gohsei Kagaku Kogyo Co., Ltd. (currently Mizushima Plant) under joint management, and in the following year, started the production of acetic acid and ethyl acetate with acetaldehyde. Consigned the production of Hi-Selon (water-soluble PVOH film) to Kansai Kagaku Kogyo Co., Ltd.
- 1965 Decided on financial participation in Kansai Kagaku Kogyo Co., Ltd.
- 1967 Started production of GOHSENL at Mizushima Gohsei Kagaku Kogyo Co., Ltd.
- 1969 Started production of VAM at Mizushima Gohsei Kagaku Kogyo Co., Ltd.
- 1971 Merged with Mizushima Gohsei Kagaku Kogyo Co., Ltd. Relocated the Central Research Laboratory to Ibaraki city, Osaka.
- 1972 Established Tokai Resin Co., Ltd. (currently Ogaki Plant Kamiya), and in the following year, started production of Hi-Selon.

- 1975 Started production of fine chemical products (pharmaceutical intermediates) at the Kumamoto Plant.
- 1980 Started production of BOVLON (bi-axially-oriented PVOH film) at the Kumamoto Plant.
- 1981 Started production of Nchigo-Polyester(High molecular weight saturated Polyester resin) at the Ogaki Plant.
- 1984 Started production of SOARNOL (ethylene vinyl alcohol copolymer resin) at the Mizushima Plant.
- 1985 Entered the optics and electronics material fields. Developed Dry Film Photoresist (DFR) and started the production of DFR at the Ogaki Plant.
- 1986 Started production of imidazol at the Ogaki Plant.
- 1987 Established the U.S. sales office NIPPON GOHSEI (U.S.A.) Co., Ltd.
- 1989 Started production of SHIKOH, ultraviolet optics (ultraviolet ray and electronic line hardening type resin) at the Ogaki Plant.
- 1993 Started production of polarizing film and retardation film at the Ogaki Plant.
- 1994 Planned the U.S. business development for SOARNOL and purchased a plant in Houston, Texas from E.I. DuPont Nemours & Company. Established NOLTEX L.L.C. under joint management.
- 1996 Established the North American sales company SOARUS L.L.C. for SOARNOL under joint management. Established NIPPON GOHSEI Europe GmbH as a European sales office.
- 1997 Transferred the DFR business to Nichigo-Morton Co., Ltd., under joint management with Morton International Company (currently Rohm and Haas Company) in the U.S. Founded Processing-Technique Development Center at Mizushima.
- 1998 Ceased production of polarizing film and retardation film.
- 2001 Established NIPPON GOHSEI UK Ltd. for manufacturing SOARNOL. Started commercial operation of a multi-plant for highly-functional GOHSENL at the Kumamoto Plant.
- 2003 Started production of OPL film (optical polarized PVOH film, a key component of polarizing film for liquid crystal displays) at the Ogaki Plant.
- 2004 Started production of SOARNOL in the U.K. Acquired all shares in Clariant Polymer Co., Ltd. (Nichigo-Mowinyl Co., Ltd.) and made it a subsidiary.
- 2005 Merged with Ogaki Kasei Kogyo Co., Ltd. Founded Functional Film Development Center at Ogaki.
- 2006 Established NIPPON GOHSEI Shanghai Office in China.
- 2008 Started production of OPL film at the Kumamoto Plant.
- 2009 Merged with Nichigo-Mowinyl Co., Ltd.

PRODUCT GUIDE

Specialty Materials Segment

◁IT's and Electronic Products Dept.▷

OPL Film™

Liquid crystal display devices

◁Soarnol Dept.▷

Soarnol™ (EVOH: Ethylene-vinyl alcohol copolymer)

High gas barrier resin for food packaging sheets; film, bottle; coating material; composite fibers

Soarlite™ (EVOH resin)

Engineering plastic

Soarblen™ (EVA; Ethylene-vinyl acetate copolymer resin)

Modifying agent for polyvinyl chloride (improving shock resistance and plasticity)

◁Specialty Polymers Dept.▷

Gohsenyl™ (Polyvinyl acetate resin)

Adhesives (wood processing, construction materials); chewing-gum base; anti-shrink agent of polyester

Coponyl™ (Acrylic copolymers)

Pressure sensitive adhesive; coating (building, plastic); ink; varnish; adhesives

Shikoh™

(UV curable urethane acrylate resin) Coating (optical film, plastic, wood); ink; adhesives; metal coating

F-Retan™

(Non-solvent urethane resin) Coating resin; molding material

Nichigo-Polyester™ (High molecular weight saturated polyester resin)

Adhesives; film coating; ink; metal coating; toner binder

Mowinyl™ (Synthetic resin emulsions)

Coating; construction materials; pressure sensitive adhesive; adhesives; paper; film

Mowinyl™-Powder

(Redispersible polymer powder) Skim coat, tile adhesive mortar, gypsum based compound, repair mortar, self-leveling compound, interior finishing

◁Functional Films Dept.▷

Hi-selon™ (Water-soluble PVOH film)

Packaging for agricultural chemicals; seed tape; transfer printing on curved surface; packaging for detergent

Bovlon™

(Biaxially-oriented PVOH film)

Packaging for foodstuffs; medical; film lamination

Basic Products Segment

◁Acetyl Chemicals Dept.▷

Acetic acid

Intermediate material for the organic chemical industry; vinegar, sauce, and other food products; raw material for perfumes, dyes, pharmaceuticals, agricultural chemicals, and synthetic fiber; mordant; photosensitizers; rubber coagulant

Ethyl acetate

Solvents; raw material for pharmaceuticals, synthetic organic pharmaceuticals, perfumes, etc.

Vinyl acetate monomer

Raw material for fibers; copolymerization material; raw material for vinyl acetate resin

Butyl acetate

Solvents; extractant of pharmaceuticals, perfumes, etc.

Solvent ME

Solvents

◁Gohsenol Dept.▷

Gohsenol™ (PVOH: Polyvinyl alcohol:

Poval: PVA)

Paper sizing; sponges; films; emulsifier; binders for ceramics and inorganic products; coating; adhesives; suspension agent; raw material for construction sheets; photographic sensitizing resin

Gohsenol™ EG (high purity grades)

Cosmetics; additives for pharmaceuticals; electronic materials

Gohsenal™-T

Textile warp sizing; paper sizing

Gohsefimer™

Conductive resin; suspension assistant; electronic materials; emulsifier; water resistant adhesive; protective layer against water, solvents and oil

Gohsesize™

Paper making; textile warp sizing; node adhesive

Gohselan™

Emulsifier; dispersant for color developer and dyes

◁Fine Chemicals Dept.▷

Imidazole

Raw material for pharmaceuticals and agricultural chemicals

1-methyl imidazole

Polyurethane foam catalyst

2-methyl imidazole

Curing promoter for epoxy resin; pharmaceuticals

Glyoxal

Processing agent for textiles; paper processing agent; raw materials for pharmaceuticals and pigments; soil hardener; hardener for chemical grout

Glyoxilic acid

Raw material for pharmaceuticals, agricultural chemicals, etc.

Diketene

Raw materials for pigments, pharmaceuticals, perfumes, preservatives, antiseptics and industrial chemicals

Methyl acetoacetate

Raw materials for dyes, organic pigments, pharmaceuticals, and agricultural chemicals

Ethyl acetoacetate

Raw materials for agricultural chemicals, pharmaceuticals, perfumes, dyes, pigments, and organic synthesis

Valproic acid

Pharmaceutical intermediates

Methyl 3-aminocrotonate

Raw material for pharmaceuticals

ABL

Raw material for vitamin B1 and pharmaceuticals

Acetic anhydride

Raw material for pharmaceuticals, sweetener, dyes and organic synthesis

Sodium acetate

Mordant; food products; dyes and pharmaceuticals; heat regenerating

Sodium dehydroacetate

Preservatives (antiseptic and mold inhibitor)

New Cide

Antiseptic and mold inhibitor for industrial use

Neulizer™

Resin stabilizer; rubber modifier

Oxalic acid, dehydrate

Rare metal refining; manufacture of starch syrup and glucose; printing and bleaching processing agent

Phtalide

Raw material for pharmaceuticals and organic synthesis

Acetoguanamine

Plywood; melamin resin modifying agent

Custom made products

(imidazole derivatives etc.)

Pharmaceuticals intermediates etc.

New Business Development Div.

◁Advanced Polymers Business Dept.▷

Nichigo G-Polymer™

(Amorphous vinyl-alcohol resin)

Barrier material (oxygen, hydrogen, helium, etc.); extrusion process (film, bottle, pipe, tank, etc.); polymer alloy, textiles (nonwoven fabric, bicomponent fiber, filter, etc.); emulsion; suspension agent, inorganic substance dispersant; resin additives; paper processing; flat panel display (FPD) application; medical application